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ABSTRACT

The central purpose of this study was to discover how students enrolled in different curricula programs (Vocational-Technical, College Transfer and General Studies) assessed (1) the quality of instruction; (2) the value of various student services; and (3) specific college practices, policies, and facilities. Another purpose was to determine if various success rate measures were related to the students assessment of the college. It was hypothesized that there would be no significant differences between the various groups in their perception of instruction; student services; and college practices, policies, and facilities; and that there would be no significant relationship between student success and their perception of these factors. One hundred students in each program completed the Institutional Self Study Survey and their responses were analyzed to determine significant differences. The only significant difference between the groups was in their evaluation of selected student services; in all other cases the null hypotheses were supported. Recommendations to the Wright College community, based upon the results of the study, are presented. (RSM/Author)

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AN ENVIRONMENTAL ASSESSMENT OF WILBUR WRIGHT COLLEGE BY STUDENTS IN DIFFERING CURRICULA PROGRAMS

by
R. Edmund Dolan

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Above all to my wife, Corky, whose support and encouragement cannot be defined by words. I pay tribute and again pledge my eternal affection.

ABSTRACT

An Environmental Assessment of Wilbur Wright College by Students in Differing Curricula Programs

by R. Edmund Dolan

The central purpose of this study was to discover how students enrolled in different curricula programs (Vocational-Technical, College Transfer, and General Studies) assessed (1) the quality of instruction, (2) the value of various student services, and (3) specific college policies, practices and facilities. It was also the purpose of this study to determine if various success rate measures were related to the students' assessment of the college.

The null forms of the four hypotheses developed are:

(1) There is no significant difference in the perception of the value of student services when comparing students by academic programs.

(2) There is no significant difference in the perception of the effectiveness of classroom instructors when comparing students by academic programs.

(3) There is no significant difference in the perception of the appropriateness of selected college policies, practices and facilities when comparing students by academic programs.

(4) There is no significant relationship between student success and student perception of student services, instructors, and college policies, practices, and programs.

Random samples of full-time beginning freshmen from each curricula program were selected. One hundred students in each program were requested to complete the Institutional Self Study Survey (ISS) and an overall response rate of eighty-nine per cent resulted. The three subgroups' assessments of the various college environmental factors were analyzed and compared using the t-test to determine significant differences. Pearson's Product Moment correlations were used to determine relationships between student

assessment and student success. Descriptive profiles of each student group were also presented, in order to gain insight and better understand the results of this study.

The null hypotheses were supported in three of the four cases. However, the hypothesis concerning the assessment of student services was not supported and was thus rejected. The three groups differed significantly in their evaluation of selected student services. More specifically, College Transfer students rate the Faculty Advising service and the Student Counseling service significantly lower than do the Vocational-Technical and General Study students. The College Transfer students also assessed the College Orientation service significantly lower (less valuable) than did those students in the General Studies program.

Other findings indicate that:

(1) Students view vocational goals, as opposed to social goals or academic goals, as the most essential college goals.

(2) A large percentage (25%) are undecided in terms of future vocational role preferences.

(3) Students view college rules and policies as appropriate.

(4) Classroom instructors are assessed as capable, understanding and competent teachers.

(5) Students assess the college social program as inadequate and unsuccessful.

(6) Students in the College Transfer program are the most successful in terms of grade point averages, persistence, and self-ratings of educational progress. General Studies students are the least successful.

Recommendations to the Wright College community, based upon the results of the study, are presented.

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CHAPTER I

Introduction To Problem

"Going down the educational superhighway hell for leather,"[1] was the way the community college movement was described by Russell Lynes, former managing editor of Harper's Magazine. Ten years ago, one out of five students began his higher education in a community college. This figure increased in 1968 to more than one out of three, and very soon it will be one out of two.[2] Since 1960, community colleges have been established for the first time in twenty major cities.[3]

This phenomenal growth is, however, not altogether surprising, for community colleges were conceived in the midst of social turmoil, and in a sense, the very vitality of the community college movement may be said to be a response to a changing society. As Patricia Cross explains,

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[1] Russell Lynes, "How Good Are the Junior Colleges," Harper's Magazine (November, 1966), p. 60.

[2] Edmund J. Gleazer, This Is The Community College (Boston: Houghton Mifflin Co., 1968), p. 4.

[3] Ibid., p. 4.

> Two social forces stand out above all others in creating the distinctive identity of the community colleges: (1) the demand of an increasing egalitarian society for the democratization of higher education, and (2) the need of a technological society for a better educated citizenry. In combination, these pressures have culminated in a national commitment to universal postsecondary education.[4]

Concomitant with the growth of this institutional segment of higher education has been the development of the field of institutional research. As discussed by Van Istendal: "The comparative newness of institutional research as a more formalized process in higher education is reflected, in part, by the relatively recent development of its own professional association . . . during this decade."[5]

A review of the literature concerning institutional research in community colleges reveals a paucity of significant studies. Medsker wrote that "little research is conducted which enables two-year colleges to obtain facts about their students."[6] He concluded that few two-year institutions have conducted institutional studies on students, and they have made only limited efforts to evaluate personnel programs.[7] A 1964 nationwide investigation of institutional research in the community college found that 20 percent had formally organized programs of institutional research.[8] A more recent nationwide survey found that

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[4] Patricia K. Cross, "The Quiet Revolution," The Research Reporter, Vol. IV, No. 3 (University of California, Berkeley, 1969), 1.

[5] Theodore G. Van Istendal, "Community College Institutional Research," a paper presented to the Association of Institutional Research, Chicago, Illinois, 1969, p. 1 (mimeographed).

1. The average junior college completes one institutional research project per year.
2. The area that receives the greatest research emphasis is "student"; the area of least emphasis is "instruction".
3. Only 23 percent had personnel employed to coordinate institutional research.[9]

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[6] Leland L. Medsker, The Junior College: Progress and Prospect (New York: McGraw-Hill Book Company, Inc., 1960), p. 164.

[7] Ibid., p. 165.

[8] Herbert L. Swanson, "An Investigation of Institutional Research in the Junior Colleges of the United States," unpublished doctoral dissertation (Los Angeles: University of California, 1965), pp. 180-183.

[9] John E. Roueche and John R. Boggs, Junior College Institutional Research: The State of the Art (Washington, D.C.: American Association of Junior Colleges, 1968), pp. 47-48.

It seems fair to conclude, as did Van Istendal, "that although community college institutional research does encompass two developing aspects of higher education--the latter, institutional research, seems to be lagging considerably behind development and progress of the general community college itself."[10]

Purpose Of The Study

To accept the goal of universal postsecondary education is to accept the responsibility to provide meaningful and substantive experiences for all who wish to continue their education. Community colleges are beginning to understand the magnitude of the task. It involves the revolutionary concept that the college must be made to "fit" the student, whereas tradition has it that students should be selected to "fit" the college. Essentially it means shifting the burden of proof from the student to the college.

In the state of Illinois, home of the first publicly supported junior college (Joliet, 1902), the legislature in 1965 enacted the Illinois Public Junior College Act. This Act stipulates that " . . . junior college districts shall admit all students qualified to complete any one of their programs including general education, transfer, occupational, technical, and terminal . . ."[11]

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[10] Van Istendal, Institutional Research, p. 17.

It is, thus, a demonstrable fact that community colleges in Illinois have opened new opportunities for their constituents. What is not clear, however, is how well community colleges are "fitting" the student or breaking out of the old molds to provide meaningful education to these new students.

To what extent are community colleges fulfilling their objectives as specified in the Junior College Act? More particularly, how do students enrolled in specific and differing programs (general education, technical-occupational, and transfer) assess (1) the quality of instruction, (2) the effectiveness of various student services, and (3) college policies, practices and facilities? In addition, is there a difference in the "success" rate among these three programs? Also does a relationship exist between "success" in the community college and students' perceptions of selected community college environmental factors?

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[11] State of Illinois, The Public Junior College Act (Illinois Revised Statutes, 1969), pp. 103-117.

Four hypotheses stated in the null form shall be tested in order to answer the above questions. The hypotheses are as follows:

> Hypothesis I.--There will be no significant difference in the perception of the value of student services when comparing students by academic programs.
>
> Hypothesis II.--There will be no significant difference in perception of the effectiveness of classroom instructors when students are compared by academic program.
>
> Hypothesis III.--There will be no significant differences in the perception of the appropriateness of selected college policies, practices and facilities when students are compared by academic program.
>
> Hypothesis IV.--There will be no significant relationship between student success and student perception of student services, instructors and college policies, practices and programs.

Finally, it is hoped that an institutional research model which has general applicability will result. Since emphasis, not only in Illinois but nationwide, is being placed on accountability of community college program development, the author feels that the construction of such a model to measure the relative effectiveness of multi-programs is indispensable to proper educational planning and development.

Significance Of The Study

At this juncture, it is appropriate that the question be raised regarding the value and benefit of such a study. As previously discussed one purpose of this study is to determine the students' perception of specific college environmental factors. Speaking to this point in her excellent book The Junior College Student: A Research Description, Patricia Cross remarked: "In reviewing the research on junior college students, one is impressed by the almost total lack of any systematic investigation of their (students) reactions to their college experience."[12]

The Illinois Junior College Board in its Standards and Criteria for Evaluation and Recognition explicitly states that "Each college shall develop procedures for . . . evaluation of instructional programs. Techniques of evaluation should involve follow-up studies . . . . Students . . . should be involved in evaluation procedures."[13]

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[12] Patricia K. Cross, The Junior College Student: A Research Description (Princeton: Educational Testing Service, 1968), p. 36.

[13] Illinois Junior College Board: Standards and Criteria for the Evaluation and Recognition of Illinois Public Junior Colleges and Other Guidelines, Policies and Procedures Approved by the Illinois Junior College Board (Springfield, 1970), p. 28.

Accountability is currently being increasingly emphasized in American higher education, and properly so. Community colleges in Illinois must account for their educational programs. Thus it is imperative that institutional research models, following the guidelines available, be developed.

While attempting to involve students by program (transfer, general studies, technical-vocational) in evaluating their educational experience, this study seeks to go one step further, and examines the relationship between students' evaluative perception and their educational "success". Thus, in this longitudinal follow-up study, persisters and non-persisters (dropouts) are included. Success is defined in terms of persistence, academic achievement, and self estimates of educational progress. Relationships between student success and student evaluation can be extremely beneficial in developing educational programs to fit the students.

Finally, this study seeks to establish an institutional research model, a model which other community colleges in Chicago, Illinois, and nationally can easily and inexpensively utilize.

Limitations Of The Study

This study is designed as a one year longitudinal follow-up of full-time freshman students at a single community college. Thus, it must be understood that part-time students and second year students are not included. Likewise, this study is limited to one community college and should not be interpreted as representing the City Colleges of Chicago system or community colleges in general.

A further limitation which must be recognized is that student evaluation of educational programs is but one part of a valid evaluation procedure. Other components of the community such as faculty, administrators, and outside agencies are also indispensable contributors in any program evaluation.

Organization Of The Remainder Of The Study

The balance of this dissertation is divided into four additional chapters. Titles have been omitted and the content breakdown has been summarized under the respective chapters indicated below.

Chapter II.--Chapter Two is devoted to a review of the related literature. The emphasis will be upon bringing together all relevant research. Particular emphasis will be given to studies focusing upon student perception of college environmental factors. Likewise studies involving community colleges will be carefully reviewed.

Chapter III.--The design of the study will be extensively discussed in Chapter Three. The sample, collection of data, instrument used, hypotheses to be tested, and statistical treatment of the data will be covered.

Chapter IV.--An analysis of the results will be presented along with a discussion of the results. A student profile by academic program, student evaluation of selected environmental factors, and the relationship between student perception and student "success" will be examined in detail.

Chapter V.--The various aspects of the study will be summarized and the findings will be discussed. The relevance of the findings and implications for future research will be included.

CHAPTER II

Review Of The Literature

Introduction

During the past fifteen years a plethora of research studies have focused upon the college environment. Sociologists, social psychologists, anthropologists, and other interested educators have sought to explore the college culture. Educators have always known that colleges differ from one another in various ways as familiar classifications of institutions reflect: liberal arts college, university, junior-community college; public, private, Catholic, Protestant, rural, urban, residential, commuter, and so on. The research interest during the past fifteen years has been concerned, not with refining classifications but with exploring new ways of viewing and measuring life styles and the general institutional context within which learning, growth, and development take place.

The interest in college environments appears to stem from several developments. First, there has been the example of anthropologists characterizing primitive and contemporary cultures. Second, there have been numerous studies of change in college students' values and attitudes. These studies have concurrently sought to identify which conditions or experiences may have contributed to such changes, or to learn whether there was something about the total atmosphere of the college, or its programs, or peer-group associations that was significantly important. Examples of such studies include Dressel and Mayhew,[1] Jacob,[2] and Eddy.[3] Third, higher education as a field of research has become fertile soil for social scientists from various disciplines. Studies by Lazarsfeld and Thrielens[4] in 1958, and by Merton and others[5] in 1957 are examples. Finally, the awareness of the great diversity of backgrounds, abilities, and aspirations found among college students has resulted in the hypothesizing that such differences in student bodies may explain the differences in atmosphere among colleges. Two examples of such studies are those by Darley[6] and McConnell and Heist.[7]

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[1] Paul L. Dressel and Lewis Mayhew, General Education: Exploration and Evaluation (Washington: American Council on Education, 1954), p. 302.

[2] Philip E. Jacob, Changing Values in College (New York: Harper and Brothers, 1957), p. 178.

[3] Edward D. Eddy, Jr., The College Influence on Student Character (Washington: American Council on Education, 1959), p. 185.

[4] Paul F. Lazarsfeld and Wagner Thielens, The Academic Mind: Social Scientists in a Time of Crisis (Glencoe, Illinois: The Free Press, 1958), p. 460.

Methods and Measures

The field of college environmental research was given emphasis by George Stern and C. Robert Pace during the latter part of the 1950's. The work of Pace and Stern resulted in the first objective and systematic measuring instrument for characterizing college environments, the College Characteristic

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[5] Robert K. Merton, George G. Reader, and Patricia L. Kendall (eds.), The Student Physician: Introductory Studies in the Sociology of Medical Education (Cambridge: Harvard University Press, 1957), p. 360.

[6] John G. Darley, Promise and Performance: A Study of Ability and Achievement in Higher Education (Berkeley: University of California Press, 1962), p. 191.

[7] Thomas R. McConnell and Paul Heist, "The Diverse College Student Population," in The American College, ed. by Nevitt Sanford (New York: John Wiley and Sons, Inc., 1962), pp. 225-252.

Index (hereafter referred to as CCI).[8] The CCI is based upon the dual concepts of personal "needs" and environmental "press" developed by H. A. Murray in 1938.[9] Each person is seen as having a variety of "needs," psychological and emotional, that he strives to satisfy. The environment in which the person lives is viewed as the "press" that tends to either frustrate or satisfy these needs in varying degrees.

The CCI is a measure of thirty kinds of press describing the activities, policies, procedures, attitudes, and impressions that might characterize various types of undergraduate college settings.[10] In responding to the statements in the CCI, college students act as observers of what is or is not generally true or characteristic of their college. Their vantage point is that of participants in and reporters of the college environment.

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[8] C. Robert Pace and George G. Stern, "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology, 49 (1958), 269-277.

[9] George G. Stern, "Characteristics of the Intellectual Climate in College Environments," Harvard Educational Review, 33 (Winter, 1963), 5-41.

[10] George G. Stern, "The Intellectual Climate in College Environments" in The College Student and His Culture: An Analysis, ed. by Kaoru Yamamoto (Boston: Houghton Mifflin Co., 1968), p. 206.

Another strategy of analyzing the need-press concept led Pace to construct a different instrument, the College and University Environment Scales (hereafter referred to as CUES).[11] The intent of CUES is to identify a set of dimensions along which colleges differ from one another, and to measure these dimensions by a set of items which most clearly and sharply reflect these differences. This approach directly analyzes environmental differences between institutions and proceeds without reference to any personality measures. "The focus is on looking for patterns which best characterize environments, and, for this purpose, the unit of analysis is the college, not the individual."[12] The institutional score is determined by the number of statements that are judged characteristic of its environment. The scales are labeled scholarship, awareness, community, propriety, and practicality.

Another example of the collective perception approach to describing environments are the college press scales developed by Thistlethwaite in 1959.[13] Thistlethwaite's purpose was to identify items which were related to institutions' production of future doctorates in the natural sciences and in the arts, humanities, and social sciences.

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[11] C. Robert Pace, College and University Environment Scales. Preliminary Technical Manual (Princeton: Educational Testing Service, 1963).

[12] Ibid., p. 8.

A more recent instrument which utilizes the collective perception approach is the Institutional Self Study Survey Questionnaire, College Student Form (hereafter referred to as ISS), developed in 1969 by Donald Hoyt and the American College Testing Program.[14] The ISS seeks student perceptions of various college services, classroom instruction, and college facilities, practices, and policies; likewise information concerning Aspirations, Goals, Personal and Educational Background, Self Estimates of Educational Progress and Out of Class Academic and Non-Academic Activities. A more detailed description of the ISS instrument will be presented in Chapter III.

A different way to characterize environments is to describe the type of people who live in them. The assumption is that a college environment can be determined by assessing the characteristics of the students and the number and type of degree holders produced by the institution. Based upon this proposition, Astin and Holland developed the Environmental Assessment Technique (E.A.T.).[15] The E.A.T. utilizes the following eight measures: (1) institutional size, (2) intelligence level of the student body, and (3-8) the proportion of students in each of six types of major fields (which are labeled as Realistic, Intellectual, Social, Conventional, Enterprising, and Artistic).[16]

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[13] Donald L. Thistlethwaite, "College Press and Student Achievement," Journal of Educational Psychology, 50 (1969), 183-191.

[14] American College Testing Program, Inc., Institutional Self Study Survey Manual (Iowa City: American College Testing Program, 1969), p. 108.

By factor analysis, Astin determined six factors differentiating students: (1) Intellectualism, (2) Estheticism, (3) Status, (4) Leadership, (5) Pragmatism, and (6) Masculinity.[17] An institutional profile is sketched by relating the six student differential factors and the eight institutional factors.

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[15] Alexander W. Astin and John L. Holland, "The Environmental Assessment Technique: A Way to Measure College Environments," Journal of Educational Psychology, 52 (1961), 308-316.

[16] Alexander W. Astin, "Further Validation of the Environmental Assessment Technique," Journal of Educational Psychology, 54 (1963), 217-226.

[17] Alexander W. Astin, Who Goes Where to College (Chicago: Science Research Associates, 1965), p. 20.

Although this approach helps prospective students determine the orientation of various colleges, it has little value in institutional self-study and evaluation.

The typology of student subcultures described by Trow in 1960[18] represents still another approach based on the assumption that students make the college. The four main types of campus subcultures--vocational, collegiate, academic, and non-conformist--where used by the Educational Testing Service in constructing its College Student Questionnaire in 1965.[19] The institutional atmosphere is characterized by the proportion of students identifying themselves with each of these four value patterns.

Of the above mentioned environmental assessment techniques, the most frequently utilized are the CCI and the CUES instruments. Measures based upon the collective perception approach seem to be the most direct. Within limits, no one methodology or measuring device is logically or empirically superior. The crucial issue, as Pace pointed out, is not the choice of methods, but the choice of questions to which the methods are addressed.[20]

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[18] Martin Trow, "The Campus Viewed as Culture," in Research on College Students, ed. by H. T. Sprague (Boulder, Colorado: The Western Interstate Commission for Higher Education, 1960), pp. 105-123.

[19] Richard Peterson, College Student Questionnaires and Technical Manual (Princeton: Educational Testing Service, 1965), p. 60.

General Findings

Despite the differences in approach, strategy, and assumptions, there are general similarities in the relevant results that have been obtained to date. It is our intent here to summarize these results before focusing our attention upon the research studies concerning community colleges.

Evidence indicates that the perceptions of incoming students differ from those of students who are presently enrolled, and that the perceptions of these incoming students do change after they have been at the institution for a period of time. Studies by Pace,[21] Birdie,[22] Standing and Parker,[23] and

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[20] George C. Pace, "Methods of Describing College Cultures," in The College Student and His Culture: An Analysis, ed. by Kaoru Yamamoto (Boston: Houghton Mifflin Co., 1968), p. 203.

[21] C. Robert Pace, "When Students Judge Their College," College Board Review, 58 (Winter 1965-66), 26-28.

[22] Ralph F. Birdie, "Changes in University Perceptions During the First Two College Years," The Journal of College Student Personnel, 9 (March, 1968), 85-89.

[23] G. Robert Standing and Clyde A. Parker, "The College Characteristics Index as a Measure of Entering Students' Preconceptions of College Life," The Journal of College Student Personnel, 6 (October, 1964), 2-6.

Krupius[24] further indicate that in particular the intellectual climate was perceived as being much greater prior to entering college.

Likewise, one's place of residence seems to have some bearing on the perception of the environment, in that residential students have different perceptions than do commuter students.[25,26,27] Major field of study affects the perception of the environment on larger campuses, but appears to have little significance on the small single-purpose institutions.[28,29]

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[24] Richard W. Johnson and Wayne J. Krupius, "A Cross-Sectional and Longitudinal Study of Students' Perception of Their College Environment," The Journal of College Student Personnel, 8 (May, 1967), 199-203.

[25] Charles Lindahl, "Impact of Living Arrangements on Student Environmental Perceptions," The Journal of College Student Personnel, 8 (January, 1967), 10-15.

[26] S. R. Baker, "The Relationships Between Student Residence and Perception of Environmental Press," The Journal of College Student Personnel, 7 (July, 1966), 222-224.

[27] Ralph F. Birdie, "College Expectations, Experiences, and Perceptions," The Journal of College Student Personnel, 7 (November, 1966), 336-344.

[28] C. Robert Pace, The Influence of Academic and Student Subcultures in College and University Environments, Cooperative Research Project No. 1083, Office of Education (Los Angeles: University of California, 1964).

[29] John A. Centra, Student Perceptions of Total University and Major Field Environment (unpublished Doctoral Thesis, East Lansing, Michigan: Michigan State University, 1965).

Faculty-student perceptions seemed to be linked to the size of the institution, with homogeneity existing in the smaller college.[30,31]

What is clear from the studies conducted to date[32] is that college environments differ greatly from one another in many characteristics. Accumulated results indicate clearly that the common classifications of institutions mask a great deal of diversity.

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[30] Ellen E. Ivey, C. Dean Miller, and Arnold D. Goldstein, "Differential Perceptions of College Environment: Student Personnel Staff and Students," The Personnel and Guidance Journal, 46 (September, 1967), 17-21.

[31] Beth L. McPeek, "The University as Perceived by Its Subculture: An Experimental Study," Journal of the National Association of Women Deans and Counselors, 30 (Spring, 1967), 129-132.

[32] The following are complete literature reviews of college environment research studies:

C. Robert Pace and Ann McFee, "The College Environment," Review of Educational Research, 30 (1960), 311-320.

William B. Michael and Ernest L. Boyer, "Campus Environment," Review of Educational Research, (October, 1965), pp. 264-276.

Kenneth Feldman and Theodore Newcomb, The Impact of College on Students (San Francisco, California: Jossey-Bass, Inc., 1969).

Results Of Community College Studies

Even though the assessment of college environments has in recent years become so popular, the community or junior colleges have remained, by and large, unscrutinized. The paucity of research studies focusing upon this crucial area of higher education is unfortunate. There are, however, several notable exceptions.

Richards, Rand and Rand[33] in an attempt to provide necessary knowledge for intelligent planning of community colleges undertook a replication of Astin's study of four year colleges using a population of community colleges.[34] The basic purpose was to organize the information available about community colleges into a brief profile. Such a profile could then be used both to characterize individual community colleges and to study the effects of college on students.

Utilizing institutional information from ACT files and institutional scores on the Environmental Assessment Technique, thirty-six (36) variables were reported for five hundred and eighty-one (581) community colleges. Through factor analysis it was possible to reduce the number of variables from thirty-six (36) to a more meaningful six (6).[35] The six factors are titled: Cultural Affluence, Technological Specialization, Size, Age, Transfer Emphasis, and Business Orientation. The community college factors are not congruent with factors from four year colleges and universities.

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[33] James M. Richards, Lorraine Rand and Leonard Rand, A Description of Junior Colleges (Iowa City, Iowa: American College Testing Program, 1965a), p. 28.

[34] Ibid., p. 10.

Having established a simple set of items for assessing community college environments, Richards, Rand and Rand in another study[36] sought to examine if different historical traditions, social environments, and economic needs could conceivably have produced various patterns in two-year colleges from one geographic region to another. If different patterns were found to exist, it was hypothesized, then not only could community colleges be considered socially adaptive institutions, but useful information might be provided about alternatives for the orderly development of community colleges.[37]

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[35] Ibid., p. 24.

[36] James M. Richards, Lorraine Rand and Leonard Rand, Regional Differences in Junior Colleges (Iowa City, Iowa: American College Testing Program, 1965b), p. 17.

[37] Ibid., p. 1.

Regional factors were found in all six factors, thus reinforcing the diversity of patterns of higher education, including community colleges, across the country.[38]

In an attempt to determine if certain kinds of students were likely to go to certain kinds of community colleges, Richards and Braskamp related institutional factor scores to various student characteristics.[39] Environmental factors and student characteristic scores co-varied in interesting and meaningful ways. The results supported the notion that to some extent a "matching" of students and college characteristics occurs.[40]

Utilizing Pace's CUES, Gelso and Sims[41] sought to determine if there were any differences in the perceptions of a residential, community college environment among (a) students who live at home (commuters), (b) students who reside in college dormitories (residents), and faculty members. The results of this investigation indicate that a person's location and position in a community college significantly affect some of his perceptions of the characteristics of that institution. They conclude by stating: "Recent research in this area has offered much evidence that different campus groups cannot be dealt with as if they were a homogeneous body."[42]

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[38] Ibid., p. 16.

[39] James M. Richards, Larry A. Braskamp, Who Goes Where to Junior College (Iowa City, Iowa: American College Testing Program, July, 1967), p. 28.

[40] Ibid., p. 27.

[41] Charles Gelso and David Sims, "Perceptions of a Junior College Environment," The Journal of College Student Personnel, 9 (January, 1969), 40-43.

Benjamin Gold[43] also using the CUES investigated student perceptions of the Los Angeles City College environment. Gold concluded that the students characterized their college as one where instructors are competent and businesslike, although sometimes difficult to approach, and where considerable learning takes place outside the regular classroom program.

A study conducted by Wilson and Dollar[44] sought to determine whether there were differences in perceptions of community college environments among (a) administrators,

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[42] Ibid., p. 43.

[43] Benjamin K. Gold, "The Junior College Environment: Student and Faculty Perceptions of Los Angeles City College," Research Study 68-2 (Los Angeles: Los Angeles City College, 1968), p. 29.

[44] Ronald Wilson and Robert Dollar, "Students, Teachers, and Administrators Perceptions of the Junior College Environment," The Journal of College Student Personnel, 11 (May, 1970), 213-216.

(b) faculty teaching transfer courses, (c) faculty teaching vocational-technical courses, (d) students majoring in transfer programs, and (e) students majoring in vocational-technical courses. Results reinforce the need to recognize that significant differences exist among groups in their perception of a single college environment, and that generalizing findings from one campus to another is misleading and without substance. Of particular significance was the finding that vocational-technical students and transfer students were quite similar in their perceptions of the college environment.[45] It is also of interest to note that the Community Scale was ranked lowest by all groups except administrators, who ranked it next to lowest. As Wilson and Dollar note, "One of the strongest selling points of the community college has been the community scale; i.e., small classes, individual attention, availability of faculty, and, in general, a friendly, group-oriented campus . . ."[46] Serious questions are raised by such a finding.

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[45] Ibid., p. 216-217.

[46] Ibid., p. 216.

Using former community college students along with a group of students with no community college experience, Greer[47] conducted an inquiry to compare perceptions of the community college environment. Ten facets of the environment were measured on bi-polar adjectival scales. Differences in perceptions by the two groups were evident on five of the scales. Of greater importance, however, was the finding that former two-year students showed great variance in their perception. This, the author observes, was probably due to differences among the thirteen colleges on which the respondents were reporting.

At Hutchinson Community Junior College in Hutchinson, Kansas, Stringer[48] utilizing the ISS survey form sought to determine if perceptual differences existed among students of various levels of academic status and progress. He found that students who were academically dismissed, as a group, were more critical than other groups of (1) the quality of instruction and (2) the rules and regulations of the college.[49]

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[47] Thomas Greer, "Perceived Characteristics of Junior Colleges," Peabody Journal of Education, 44 (1966), 3.

[48] James Stringer, "Identification and Analysis of Educational Status and Progress of Five Hundred Sophomore Students at Hutchinson Community Junior College," paper presented to the Institute for Student Personnel Workers (East Lansing, Michigan: Michigan State University, May, 1969) p. 46. .

Summary

The information contained in Chapter II has been relevant and germane to the area of environmental studies and to the present research being presented. The section titles: (1) Methods and Measures; (2) General Findings; and (3) Results of Community College Studies comprise the major areas which were reviewed.

A review of the various instruments being utilized to measure college environments and the assumptions these instruments rested upon was presented. It was observed that no one methodology was innately superior to another and that the choice of questions to which methods are addressed was crucial. The relevant general findings with respect to students' perception of the environment were reviewed. Comprehensive reviews of the literature were cited and it was concluded that common classifications of institutions, such as liberal arts colleges, universities, etc., mask a great deal of diversity.

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[49] *Ibid.*, p. 38.

In reviewing community college research studies it is evident that characteristics differ considerably from region to region. There was evidence that within regions two-year colleges likewise differed considerably. Finally, it seems that different groups on the same campus perceive the college environment in different and significant ways.

The findings here provide definite direction to the subsequent chapters by focusing the attention of this study on a single community college. The literature contains very little concerning the relationship of multiple groups' environmental perceptions to various measures of educational success.

CHAPTER III

Design Of The Study

Introduction

The basic methodology used in this research study will be discussed in this chapter. More specifically, this chapter will include sections on the sample selection; procedures involved in data collection; the development, reliability, and validity of the instrument; hypotheses to be tested; and statistical treatment of the data.

Selection Of Sample

The sample groups selected for this study were students who had enrolled at Wright College as full-time, beginning freshmen in the Fall semester of 1969. A full-time student is defined as one who has registered for 9 or more semester hour credits. A beginning freshman is defined as one who has no previous college experience. In the Fall of 1969, 1,201 full-time, beginning freshmen entered Wright College. Of this group 553 were identified as vocational-technically oriented, 209 enrolled in the general studies program, and 439 indicated preference for the college transfer program. In selecting the stratified random sample, a table of random numbers was used. A list of the names of the full-time beginning students in each of the three programs was obtained; consecutive numbers were listed next to the student names on each roster (1-553, 1-439, and 1-209), and finally one hundred student names were randomly selected from each roster.

The rationale for selecting full-time, beginning freshmen was: As full-time enrollees the students will have been on campus for an entire year and thus been part of the environment long enough to form judgments regarding the college. Also, as beginning freshmen all students will have had no previous college exposure and will have started college at the same time.

Because the college environment is described in this study by asking students to report on their perceptions, it was necessary to select samples large enough so that unusual individual perceptions did not exert undue influence on the results. In a monograph by Linn, Davis and Cross entitled A Guide to Research Design, samples of between 50 and 100 are recommended.[1]

Data Collection

In order to maximize the response rate several strategies were employed in collecting the data. Student packets containing (a) a personalized cover letter with a specially prepared instruction sheet,[2] (b) the survey booklet and answer sheet,[3] and (c) a postage-paid return envelope were prepared. Information concerning students' home addresses, telephone numbers, and class schedules was made available by the Wright College Office of Research and Evaluation. All packets were either distributed in class[4] or mailed during the week of May 4 - May 11, 1970.

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[1] Robert Linn, Junius Davis, and Patricia Cross, A Guide to Research Design: Institutional Research Program for Higher Education (Princeton: Education Testing Service, 1965), pp. 21-22.

[2] See Appendix C: Letter to Students with Instructions.

[3] See Appendix A: Survey of Educational Status and Progress: Student Form. Referred to throughout as the ISS questionnaire.

[4] See Appendix D: Memo to Faculty

Two weeks later nearly 50 percent of the students had responded. At this time (May 25 to May 29) all non-respondents were called on the telephone. The telephone calls served to clarify the purpose of the questionnaire, to answer questions as to how individual students were selected, and to express appreciation for cooperation. By June 10, the response rate had risen to 88 percent. At that time a second follow-up letter[5] was sent to the non-responding students. Final response rates were: Transfer Group, eighty-nine (89) percent; Vocational-Technical Group, ninety (90) percent; General Studies Group, ninety-three (93) percent. The total overall response rate was ninety and six-tenths (90.6) percent.

During the third week of June official cumulative grade point averages were collected and recorded. Also, final academic status was determined in terms of persistence and non-persistence and recorded. Data collection was complete by June 25 and all results were sent to Iowa City, Iowa, where the data were processed by the ACT Computer Center. In processing the data, it was arranged to have ACT access their Student Data Bank to obtain previously collected data which were useful for this investigation.

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[5] See Appendix E: Follow-up Letter to Students

Instrumentation

The instrument used in this study is the experimental version of the Institutional Self Study, College Student Form (see Appendix A), developed by Drs. Donald Hoyt and Oscar Lenning. As described by Lenning, the ISS consists of standard questions about student goals and educational experiences. Likewise student evaluations concerning faculty, classroom atmosphere, institutional policies, facilities and student services are assessed.[6] The questionnaire is divided into the following sections:

1. Goals and aspirations
2. Evaluation of college policies, practices and facilities
3. Evaluation of college student personnel services
4. Progress toward various educational outcomes
5. Evaluation of college instructors
6. Out of class intellectual activities
7. Out of class non-academic accomplishments

In consultation with Dr. James Maxie, Director of Research Services at ACT, Dr. Henry Moughamian, Coordinator of

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[6] Oscar T. Lenning, The Institutional Self-Study Service Manual (Iowa City: American College Testing Program, 1970), pp. 9-10.

Instructional Services at the City Colleges of Chicago, and Dr. Ralph Smith, Director of Research and Evaluation at Wright College, it was decided to utilize only sections one through five of the ISS questionnaire. The sections concerning out of class activities were judged inappropriate for the students of this urban community college.

The ISS survey questionnaire, College Student Form, is a straightforward self-report instrument. The amended ISS questionnaire as used in this study required about twenty (20) minutes to complete. The experimental version of the ISS questionnaire, Survey of Educational Status and Progress, was utilized because it was appropriate to the method of data collection strategies employed. The items in the experimental version are as they appear in the marketed version.

The development of the initial ISS survey instrument grew out of several years of work by Donald P. Hoyt. The experimental version was entitled the Survey of Educational Status and Progress. The instrument became operational in the spring of 1969 as the Institutional Self-Study Survey and was in the form of a scorable booklet. The present version of the ISS questionnaire is a reusable booklet, and students mark their responses on a separate answer sheet. All items in the new edition were transmitted from the previous edition, with minor clarifications and vocabulary updating. Thus, the national norms developed during 1968 are still applicable.[7]

A number of the ISS questionnaire items have their roots in research conducted over the years by ACT staff members, while others are based upon university conducted research. Recognized expertise, rather than research, was used in developing items for two sections and each section was completed only after a thorough review of the literature pertinent to that area and consultation with expert practitioners in the field. A summary description of the items used in this study and their development is presented in Appendix B.[8]

Validity

For most of the items the validity rests primarily on relevant research and consultation with experts in the field. Another evidence of content validity rests in the items themselves. They are essentially straightforward statements, with no attempt to develop subtle scales.[9]

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[7] Lenning, ISS Manual, p. 53.

[8] Appendix B: Summary description of amended ISS survey.

[9] Lenning, ISS Manual, p. 56.

Student ratings, and especially student self-ratings, are often criticized for a variety of reasons. However, a number of research studies give strong evidence for the validity of self-report information. Walsh[10] found that students seldom distort self reports, even when incentives to do so are introduced. Davidson[11] found that self-reported high school grades corresponded to actual grades recorded on official transcripts. A reanalysis of Davidson's data demonstrated correlations ranging from .91 to .93.[12]

In most sections of the ISS questionnaire only the student could be expected to give a competent answer. Questions about the students' plans, goals and aspirations, self-perceived progress in reaching various objectives, and assessment of the various aspects of the college environment require the students' own responses.

Reliability

In establishing reliability data for the ISS questionnaire, Hoyt and Lenning report reliability estimates based upon the total weighted sample of sophomores and seniors used for developing ISS national norms. Kuder-Richardson formula 20 and Kuder-Richardson formula 21 reliability coefficients for the various ISS scales far exceeded the minimum acceptable value of .40.[13]

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[10] William B. Walsh, "Validity of Self Report," Journal of Counseling Psychology, 14 (1967), 18-23.

[11] Oluf M. Davidson, "Survey of Reliability of Student Self Report High School Grades" (Iowa City: American College Testing Program, 1964).

[12] Lenning, ISS Manual, pp. 56-57.

Hypotheses Tested

The hypotheses tested in this study will be stated in null form. The direction of the testing was to reject the null hypotheses at the established level of significance, which was 0.05.

> Hypothesis I.--There is no significant difference in the perception of the value of student services when comparing students by academic programs.
>
> Hypothesis II.--There is no significant difference in perception of the effectiveness of classroom instructors when students are compared by academic program.
>
> Hypothesis III.--There is no significant difference in the perception of the appropriateness of selected college policies, practices and facilities when students are compared by academic program.

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[13] *Ibid.*, p. 59.

Hypothesis IV.--There is no significant relationship between student success and student perception of student services, instructors and college policies, practices and programs.

A student's success is measured by the following factors: (1) cumulative grade point average, (b) persistence vs. non-persistence, and (c) self-evaluation of progress toward specific educational objectives.

Statistical Treatment Of Data

To test the difference between means of the groups which were compared the t-test was utilized. The null hypothesis is that the two populations from which the samples were drawn have the same means (H_0: $M_1 = M_2$). In other words, the mean of one sample is equal to the mean of another sample. Stated in null hypothesis terms, there is no difference between the means of the two samples (groups).

The 0.05 level of confidence was used in determining the significance of the t-ratio.[14] Differences which were significant at the 0.01 level are specifically noted.

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[14] See Appendix F for formula.

Analysis of the interrelations of the variables under study was made utilizing Pearson's product moment correlation coefficient.[15] Product moment correlation coefficients are utilized because a linear relationship exists between the variables in question. Statistical treatment of the data obtained was processed by computer at the Research Center of the American College Testing Program.

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[15] See Appendix G for formula.

CHAPTER IV

Presentation And Analysis Of The Data

Introduction

The primary objective of this investigation was to study student ratings of various factors of the Wright College campus environment, and to compare various subgroups of the student population. Furthermore, it was decided to analyze the results to see if any relationship existed between student perception of the institutional environment and various measures of success. As indicated in Chapter III, ninety (90) Technical-Vocational students, eighty-nine (89) College Transfer students, and ninety-three (93) General Studies students responded to the questionnaire.

This chapter will first present descriptive data in order to give the reader a profile of the three student subgroups which comprise this study. The second part of this chapter will focus upon data directly relevant to the hypotheses stated in Chapter III.

Descriptive Profile

Table 1 lists the total number of full-time beginning freshmen at Wright College in the Fall of 1969, as well as the number of the original sample and the number of students who responded with valid information and thus were included in the analysis. It is noted that eighty-eight (88) of the ninety (90) questionnaires returned by students in the Vocational-Technical program were usable for research purposes. All eighty-nine (89) of the College Transfer group responses were usable, and ninety-two (92) of the ninety-three (93) General Studies students' responses were valid for research purposes.

Table 1

Full-time Beginning Freshmen at
Wright College, Fall, 1969

Student Program	Original Group	Sample Group	Final Sample
Vocational-Technical Program	553	100	88
Transfer Program	439	100	89
General Studies Program	209	100	92
TOTAL	1201	300	269

The high response rate is apparent by observing the numbers included in the final sample. The overall response rate of nearly ninety (90) percent is most satisfactory. It is noted that the following tables of information will include only those students who comprised the final sample. In presenting the following tables, the N of each group will remain constant; i.e., Vocational-Technical eighty-eight (88), College Transfer eighty-nine (89), and General Studies ninety-two (92), unless otherwise noted.

Table 2 gives a distribution of ACT composite scores by program with national normative figures. The ACT composite score is made up of four subtest scores: English, Mathematics, Social Science, and Natural Science.

Table 2

Distribution of Composite ACT Scores
(Percentages)

Standard Score	Vocational Technical	College Transfer	General Studies	Nat. 2-Year Coll. Sample
26-36	0.0	2.3	0.0	5.0
21-25	7.3	30.2	0.0	24.0
16-20	45.6	58.2	19.5	38.0
11-15	39.8	9.4	64.4	26.0
1-10	7.3	0.0	16.0	7.0
Mean	15.7	19.7	13.1	17.6
S.D.	3.2	3.0	2.8	4.9
N	68	86	87	140,314[1]

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[1] American College Testing Program, Eastern Regional Office, "National Community College Class Profile, Fall, 1969," pp. 1-28. (Mimeographed.)

The students in the Transfer program have the highest mean score (19.7), followed by students in the Vocational-Technical (15.7), and General Studies (13.1) programs. The General Studies group, with the lowest mean ACT score, is in a program which is tailored to their needs and which attempts to aid them in acquiring the academic skills they need to perform satisfactorily in college level courses. The College Transfer group, with the highest mean score, is in a program which is tailored to senior college programs.

Table 3 presents a distribution of the vocational choices of the three groups as well as norms for public 2-year colleges.

In the Vocational-Technical group nearly twenty-four percent (24%) of the students chose the Business, Political and Persuasive fields, and eleven percent (11%) chose Engineering. In the Transfer group nearly twenty-six percent (26%) preferred the Educational fields and nearly seventeen per cent (17%) Business, Political and Persuasive fields. In the General Studies group seventeen percent (17%) chose Art and Humanities and seventeen percent (17%) chose the Business, Political and Persuasive fields. Thus, while each group chose a different vocational field first, each ranked the Business, Political and Persuasive fields as the second highest vocational field. Also of interest must be the large percentage of undecided students in each group.

Table 3

Distribution of Vocational Choices
(Percentages)

Vocational Choices	Vocational-Technical	College Transfer	General Studies	National N=140,000
Educational Fields	7.9	25.8	8.7	13.5
Social Science and Religion	1.1	3.4	4.3	5.5
Business, Political and Persuasive Fields	23.9	16.9	17.5	16.8
Scientific Fields	1.1	2.2	2.3	2.2
Agriculture Fields	0	2.2	1.2	3.0
Health Fields	6.8	5.6	8.7	7.8
Art and Humanities	4.6	3.4	16.8	5.7
Engineering	11.4	5.6	7.6	5.7
Trade, Industrial and Technical	6.8	1.1	0	5.3
Housewife	3.4	2.2	1.2	1.1
Other	10.2	6.8	2.3	8.9
Undecided	22.7	24.7	29.3	24.4

Table 4 shows the distribution of student vocational role preference. The vocational role focuses upon the type of work an individual may wish to engage in, as opposed to the field of work or vocational choice as depicted in Table 3.

Table 4
Vocational Role Preference
(Percentages)

Vocational Role	Vocational-Technical	College Transfer	General Studies	National N=140,000
Researcher or Investigator	8.4	4.7	4.8	6.4
Teacher or Therapist	6.0	28.2	15.5	18.8
Administrator or Supervisor	13.3	7.1	17.9	9.6
Promoter or Salesman	8.4	2.4	7.1	4.7
Practitioner or Producer	14.5	9.4	11.9	17.4
None of the above	18.1	10.6	19.0	19.1
Two or more roles	7.2	7.1	6.0	2.7
Don't know; undecided	24.1	30.6	17.9	21.3

Of interest here is the large number of Transfer students, twenty-eight percent (28%), who prefer "teacher or therapist" roles. The Vocational-Technical and General Studies students' preferences seem to be relatively evenly distributed. Again we call attention to the large percentage of undecided responses.

Table 5 presents a distribution of the degrees sought by the three groups. Of special interest in this table is the percent of General Studies students who aspire for a professional degree beyond the Bachelor level. Whereas over twenty-eight percent (28%) of the General Studies group have such aspirations, only seventeen percent (17%) of the Vocational-Technical group aspire to Master degree level or beyond.

Table 5
Level of Educational Aspiration
(Percentages)

Educational Level Goal	Vocational-Technical N=88	College Transfer N=89	General Studies N=89	National N=140,000
Vocational or Technical (less than 2 years)	4.5	1.1	5.4	3.1
2-year college degree	29.5	10.1	14.1	22.6
Bachelor's or Equivalent	44.3	51.7	41.3	43.6
Masters (M.A., MBA)	12.5	25.8	18.5	17.9
Ph.D. or Ed.D.	0.0	1.1	3.3	3.4
M.D. or D.D.S.	2.3	3.4	4.3	1.9
Bachelor of Laws (L.L.B.)	2.3	2.2	2.2	1.6
Bachelor of Divinity	0.0	0.0	0.0	0.3
Other	4.5	4.5	10.9	5.6

Table 6 reports student reactions to four "college goal" scores. Using a four point scale, students indicated the degree of importance they attached to twelve (12) educational goals.

These twelve educational goal scores cluster into four college goal scores. Each student receives a score for his total rating of four types of goals.

Table 6
Importance of Four Types of College Goals
(Mean Score)

Educational Goal		Vocational-Technical	College Transfer	General Studies	National N=8,529
Academic	M	5.85*	6.07	6.12	6.13
	SD	1.4	1.3	1.3	1.6
Vocational	M	6.68	6.65	7.13	6.77
	SD	1.3	1.5	1.3	1.8
Social	M	4.83	4.69	5.01	5.03
	SD	1.6	1.8	1.7	1.9
Non-Conventional	M	5.22	5.10	5.59	5.18
	SD	1.9	1.7	1.8	2.0

*Interpretation: Essential = 8 or 9 Desirable = 2, 3, or 4
Important = 5, 6, or 7 Not Important = 0 or 1

The academic goals reflect such cultural desires as increasing the ability to think, intellectual interests, and appreciation of art, music and literature. The vocational goals were concerned with discovering one's vocational interest and obtaining the specific skills or academic requirements needed in a profession or job. Social goals included items dealing with improved skills in interpersonal relationships, leadership, and social capacity. The *Nonconventional* goals concerned independence and self-reliance, political or social justice, and the identification of causes to which one can become dedicated. These goals were derived from Trow's typology of college student subcultures (see Appendix B, pp. 107-116).

Analysis of the table demonstrates that *vocational* goals are viewed as the most important of the college goals by all three student groups. The *academic* goals are ranked second by each group, followed by *nonconventional* goals and *social* goals. This pattern is similar to the two-year college norm group. Of particular interest is that the General Studies students rate each of the four goals as more important than do either of the other groups. As such, it is interesting that the College Transfer students do not rate *academic* goals as the most important.

Vocational goal statements refer to discovering vocational interests, attaining vocationally related skills, and meeting job requirements. Hoyt and Munday point out that students who score high in this area will probably respond most favorably to practical-applied approaches to academic work.[2]

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[2] Donald P. Hoyt and Leo A. Munday, *Your College Freshmen* (Iowa City, Iowa: American College Testing Program, 1968), pp. 21-22.

Table 7 contains a distribution of cumulative grade point averages earned after one academic year. Fifty-two percent (52%) of the General Studies group, forty-six percent (46%) of the Vocational-Technical group, and thirty-four percent (34%) of the College Transfer group earned grade point averages of less than 2.00.

Table 7

Distribution of Cumulative Grade Point Average
(Percentage)

Grade Point Average	Vocational Technical	College Transfer	General Studies
3.80-4.00	-	-	-
3.50-3.79	2.3	3.4	-
3.20-3.49	-	3.4	1.1
2.90-3.19	5.7	9.0	4.3
2.60-2.89	6.8	13.5	12.0
2.30-2.59	13.6	21.3	9.8
2.00-2.29	25.0	15.7	20.7
1.70-1.99	23.9	12.4	13.0
1.40-1.69	12.5	9.0	9.8
Below 1.40	10.2	12.4	29.3

Table 8 contains information regarding student persistence. Persistence is defined as having remained in school for the entire academic year. As demonstrated in Table 8, students in the Vocational-Technical program had the highest persistence rate and students in the General Studies program, the lowest.

Table 8
Distribution of Persistence
(Percentages)

Persistence	Vocational Technical	College Transfer	General Studies
Completed Academic Year	94.3	87.6	80.4
Did not Complete Year	5.8	12.4	19.6

Table 9 contains the average self-ratings of progress toward specific educational goals. The items relating to this table were suggested in research by Pace and Baird (see Appendix B, pp. 107-116). The assumption is that one can learn valuable things about a student's development simply by asking him to evaluate it. The student is asked to indicate the degree to which he feels he has made substantial progress (3), some progress (2), or not much progress (1). The higher the score, then, the more progress an individual feels he has made. The twelve educational goals are clustered into six "college goals". The number of items which comprise each college goal is indicated.

Table 9
Average Self-Ratings of Educational Progress

College Goal		Vocational Technical	College Transfer	General Studies	National N=5,464	No. of Items
Intellectual-Humanistic	M	5.63	6.50	5.78	6.44	3
	SD	1.5	1.5	1.4	1.5	
Group Welfare	M	3.94	4.25	4.19	4.28	2
	SD	0.9	0.9	1.0	1.0	
Scientific-Independent	M	6.39	6.80	5.97	6.86	3
	SD	1.5	1.4	1.5	1.4	
Practical-Status	M	4.20	3.57	3.54	4.33	2
	SD	1.1	1.1	1.1	1.1	
Personal-Development	M	2.32	2.31	2.41	2.45	1
	SD	0.6	0.6	0.6	0.6	
Communication Skill	M	2.20	2.32	2.15	2.30	1
	SD	0.7	0.6	0.7	0.7	

The College Transfer students indicated the greatest degree of educational progress in four of the six goals. As demonstrated in Table 9, the College Transfer group's mean score was the highest, thus indicating a rating of greater progress, on the Intellectual-Humanistic scale, the Group Welfare scale, the Scientific-Independent scale, and the Communication scale. The Vocational-Technical students' self-rating on the Practical-Status scale (4.20) indicated the greatest progress on that scale, whereas the General Studies group indicated the greatest degree of progress on the Personal-Development scale.

In viewing the three groups we see that the College Transfer group achieved highest on the academic achievement scale (ACT = 19.7) and also, after one year, that over sixty-six percent (66%) of the group achieved a grade point average of 2.00 or higher. This same group rated themselves as having achieved greater educational progress than the other two groups on four of six scales: Intellectual-Humanistic, Group Welfare, Scientific-Independent, and Communication Skills. Over thirty three-percent (33%) planned to pursue a master's degree or higher and vocational goals were viewed as the most important college goal. Academic and non-conventional goals were rated as important while social goals were seen as desirable. The teacher or therapist vocational role was preferred by over twenty-eight percent (28%) of the College Transfer group and over twenty-five percent (25%) planned on entering the educational field. A large percent were unsure of either their vocational field (24%) or their vocational role preference (30.6%).

The General Studies group had the lowest composite ACT score (13.1) and had the lowest percent (47.9%) to achieve a grade point average of 2.00 or higher. Although this group had the lowest academic achievement scores and the lowest persistence rate (80%), they viewed themselves as making more progress on the Personal Development scale than did the Vocational-Technical group or the College Transfer group. Likewise, the General Studies group rated each of four educational goals (Table 6) as more important than did either of the other groups. The educational aspiration of students in the General Studies program is relatively high. Over twenty-eight percent (28%) aspire to a degree beyond the Bachelor's level. The vocational role preferences of this group focused around Administrator or Supervisor (18%) and Teacher or Therapist (16%), with a significant number being undecided (18%). Nearly thirty percent (30%) said they were unsure of the vocational field they eventually wished to enter, whereas eighteen percent (18%) visualized the Business, Political, Persuasive fields, and another seventeen percent (17%) visualized Arts and Humanities.

The Vocational-Technical group is distinguished by having the highest persistence rate, over ninety-four percent

(94.3%). An ACT composite score of 15.7 falls between the other two groups and near the thirty-fifth percentile nationally. Over fifty-three percent (53%) achieved a grade point average of 2.00 or higher. This group rated themselves higher than the Transfer group and the General Studies group in attaining educational progress on the Practical-Status scale. They rated themselves lower than the other two groups on the Intellectual-Humanistic Group Welfare and Scientific-Independent scales. Academic, Vocational, and Non-Conventional goals were considered important, whereas Social goals were viewed as desirable. Nearly twenty-four percent (23.9%) indicated vocational choices in the Business, Political, and Persuasive fields, and nearly fifteen percent (14.5%) chose Practitioner or Producer as their vocational role preference. High "undecided" rates characterized both the vocational field and vocational role choices.

Having drawn a profile of each group in terms of the academic achievements, vocational preferences, educational aspirations, educational goal preferences, and success indicators as measured by cumulative grade point average, persistence, and self rating of educational progress, let us turn our focus upon the student groups' evaluation of the college environment.

Presentation Of Results

In comparing the three groups on the basis of their perceptions of the environmental characteristics of the institution, the data will be presented in the order of the stated hypotheses:

I There is no significant difference in the perception of the value of student services when comparing students by academic programs.

II There is no significant difference in the perception of the effectiveness of classroom instruction when students are compared by academic programs.

III There is no significant difference in the perception of the appropriateness of selected college policies, practices and facilities when students are compared by academic programs.

IV There is no significant relationship between student success and student perception of student services, instructors, and college policies, practices, and programs.

Evaluation of Student Services

Table 10 shows the comparison of group evaluation of various student services.

Table 10

Evaluation of Student Personnel Services
(Percentages)

Service	Rating	Vocational Technical	College Transfer	General Studies
Faculty Advising	Very valuable	23.9	13.5	37.0
	Worthwhile	45.5	41.6	44.6
	Little benefit	23.9	36.0	17.4
	Never used	6.8	9.0	1.1
Counseling	Very valuable	28.4	10.1	38.0
	Worthwhile	35.2	29.2	39.1
	Little benefit	25.0	43.8	20.7
	Never used	11.4	16.9	2.2
Financial Aids	Very valuable	8.0	3.4	9.8
	Worthwhile	9.1	7.9	8.7
	Little benefit	4.5	4.5	12.0
	Never used	78.4	84.3	69.6
Extracurricular Advising	Very valuable	4.5	1.1	4.3
	Worthwhile	11.4	11.2	28.3
	Little benefit	19.3	15.7	19.6
	Never used	64.8	71.9	47.8
Orientation	Very valuable	9.1	9.0	18.5
	Worthwhile	26.1	21.3	27.2
	Little benefit	34.1	43.8	33.7
	Never used	30.7	25.8	20.7
Health	Very valuable	4.5	0.0	4.3
	Worthwhile	6.8	1.1	10.9
	Little benefit	5.7	6.7	6.5
	Never used	83.0	92.1	78.3
Remedial	Very valuable	15.9	2.2	26.1
	Worthwhile	15.9	9.0	29.3
	Little benefit	11.4	9.0	19.6
	Never used	56.8	79.8	25.0

The General Studies group rated the Faculty Advising, Counseling, and Orientation services as more valuable than either the College Transfer group or the Vocational-Technical group. The College Transfer group found all three services the least valuable. The Faculty Advising service was rated the most valuable service by all three groups. A majority of the students in the Vocational-Technical group and in the General Studies group who used the Counseling service found it worthwhile or valuable. However, a majority of the College Transfer students who used the service found it of little benefit. The Remedial service was evaluated favorably by the General Studies students, whereas a majority of the other two groups did not use the service. The Financial Aids service was utilized by only a small percentage of students. This is also true for the Health service. It is interesting to note that the Extracurricular Advising service was utilized by over fifty percent (50%) of the General Studies group, whereas only thirty-five percent (35%) of the Vocational-Technical group and twenty-eight percent (28%) of the College Transfer group utilized this service.

To test the null hypothesis, that the three groups did not evaluate these services in significantly different ways, the t-test of the difference between two means was used. Only those services which at least sixty percent (60%) of each group utilized and thus evaluated were subjected to analysis.

Table 11 presents the t-ratios between groups for the Faculty Advising Service, the Counseling Service, and the Orientation Service.

Table 11

t-Ratios for the Comparison of All Groups on Selected Student Personnel Services

	Faculty Advising			Counseling			Orientation		
Group	Mean	S.D.	t-ratio	Mean	S.D.	t-ratio	Mean	S.D.	t-ratio
Vo.-Tech.	2.00	0.7	2.08*	2.04	0.8	3.53**	1.64	0.7	0.94
Coll. Tr.	1.77	0.7		1.61	0.7		1.52	0.7	
Vo.-Tech.	2.00	0.7	1.81	2.04	0.8	1.17	1.64	0.7	1.29
Gen. Stu.	2.20	0.7		2.18	0.7		1.81	0.8	
Coll. Tr.	1.77	0.7	3.95**	1.61	0.7	4.90**	1.52	0.7	2.25*
Gen. Stu.	2.20	0.7		2.18	0.8		1.81	0.8	

*Significant at the .05 level.
**Significant at the .01 level.

As can be seen by the information presented in Table 11, significant differences are found between students in the Vocational-Technical program and students in the College Transfer program in their rating of both the Faculty Advising services and the Counseling service. Statistically significant t-ratios exist between the College Transfer students and students in the General Studies program on each of the three student services: Faculty Advising, Counseling, and Orientation. Significant differences beyond the 0.05 level are found on five of the nine group comparisons. Thus, there exists sufficient evidence to reject the null hypothesis at the 0.05 level of confidence. In other words, empirical evidence indicates that significant differences in the perception of the value of selected student services does exist when comparing students by academic programs. Specifically, the College Transfer students assess the Faculty Advising service and the Counseling service significantly lower than do either the General Studies students or the Vocational-Technical students. The College Transfer students also rate the College Orientation program significantly different (lower) than do students in the General Studies program.

Evaluation of Instructors

Table 12 presents student reaction to classroom instructors. Fourteen items have been clustered into three factor areas: Class Conduct, Student Involvement, and Teaching Style. Students were asked to respond to a statement in terms of whether it was true of (1) a majority of their instructors, (2) a minority of their instructors, or (3) about half of their instructors. Table 12 presents the percentage of students responding to the first two options.

A significant number of students in each group feel that their instructors do not have an unusual facility for communicating their knowledge to students. General Studies students are more critical of their instructors than either the Transfer group or the Vocational-Technical group in rating instructors' ability to distinguish between major and minor points. The College Transfer students rate their instructors more positively than the other two groups in terms of relating course material to contemporary problems. Students in each of the three groups believe that out of class assignments are reasonable and that only a small minority of their teachers give disorganized, superficial or imprecise treatment to their material.

In analyzing the Student Involvement factor we note each student group views a majority of their instructors as encouraging student classroom participation. The statements "Instructors don't seem to care whether class material is understood or not" and "Instructors seem 'out of touch' with

Table 12

Student Assessment of Instructors
(Percentages)

Factor	Vocational Technical		College Transfer		General Studies	
	Mj*	Mn	Mj	Mn	Mj	Mn
CLASS CONDUCT						
Unusual facility Communic. Knowledge	11	34**	16	39	11	33
Disorganized, Superficial Imprecise	6	75	0	83	5	63
Assignments Reasonable	55	13	56	11	43	14
Insuf. Distinc. Between Major & Minor Points	13	45	8	56	13	33
Relate Content to Contemp. Problems	24	16	45	19	29	19
STUDENT INVOLVEMENT						
Encourage Class Particip.	81	7	76	5	67	7
Permit Student Voice in Class Direction	16	38	10	53	23	29
Don't Care if Material Understood	5	78	8	75	10	63
Out of Touch with Student Life	9	60	7	67	13	54
TEACHING STYLE						
Lectures Dry, Dull, Monotonous	8	51	7	53	16	35
Uneasy and Nervous	3	90	0	98	8	75
Criticize, Embarrass Students	1	79	1	92	2	82
Entertaining Manner	19	37	15	35	15	28
Describe Pers. Opinion & Experience	28	17	32	27	35	16

*Mj="Majority of my Instructors"
Mn="Minority of my Instructors"

**(Percents do not total 100 as "About half my instructors" response not reflected in Table 12.)

student life" are characteristic of only a small minority of faculty. College Transfer students feel that a majority of instructors do not permit students an important voice in determining class objectives and procedures.

Whereas only eight percent (8%) of the Vocational-Technical students and seven percent (7%) of the College Transfer students felt that dry, dull and monotonous lectures were descriptive of a majority of their teachers, sixteen percent (16%) of the students in the General Studies group felt this was descriptive of a majority of their instructors. Results also indicate that General Studies students found more instructors to appear uneasy and nervous than did either of the other two student groups. All groups indicate that few instructors criticize or embarrass students in the classroom. Each group reported that presenting material in an entertaining manner was found to be characteristic of only a small number of instructors, whereas giving personal opinions or describing personal experiences was characteristic of a greater number of classroom instructors.

To test the null hypothesis, that the three groups did not evaluate their instructors in significantly different ways, the t-test of the difference between two means was utilized.

Evaluative statements were grouped into three factors: Class Conduct, Student Involvement, and Teaching Style, and are compared by student groups. Table 13 presents t-ratios between groups for the factors named above.

Table 13

t-Ratios for the Comparison of All Groups on Assessment of Instructors

	Class Conduct			Stud. Involvement			Teaching Style		
	Mean	S.D.	t-ratio	Mean	S.D.	t-ratio	Mean	S.D.	t-ratio
Vo.-Tech. Coll. Tr.	8.61 8.21	1.7 1.9	1.46	6.20 6.43	1.4 1.5	1.04	7.91 7.81	1.7 1.5	0.41
Vo.-Tech. Gen. Stu.	8.61 9.04	1.7 1.7	1.69	6.20 6.51	1.4 1.9	1.20	7.91 8.29	1.7 1.9	1.42
Coll. Tr. Gen. Stu.	8.21 9.04	1.9 1.7	3.08**	6.43 6.51	1.5 1.9	0.33	7.81 8.29	1.5 1.9	1.89

**Significant at the .01 level.

As demonstrated in Table 13, differences between group means were not statistically significant on the Teaching Style or Student Involvement factors. Likewise on the Class Conduct factor the Vocational-Technical and College Transfer groups did not differ significantly, nor did the Vocational-Technical and General Studies groups. However, the College Transfer and the

General Studies groups did differ significantly on the Class Conduct factor. Since on eight of the nine possible combinations there existed no significant differences, we would not reject the null hypothesis. Rather we tend to accept the null hypothesis that significant differences do not exist when comparing students in differing programs with respect to their evaluation of instructors. In accepting the null hypothesis, we note, however, that the College Transfer students and the General Studies students did differ significantly in their evaluation of their instructors on the Class Conduct factor.

Evaluation of Selected College Policies, Practices and Facilities

Table 14 shows the comparative group evaluation of selected college policies, practices and facilities. Students were asked to respond in terms of agreement, disagreement, or no opinion to statements about specific policies, practices and facilities. In Table 14 the response "partly agree and partly disagree" is not reflected. Statements are clustered into three factor areas: Academic Matters, Rules and Policies, and Non-Academic Facilities and Programs.

Table 14

Student Reaction to Selected Policies, Practices and Facilities (Percentages)

	Vocational Technical			College Transfer			General Studies		
	A	D	N*	A	D	N	A	D	N
ACADEMIC MATTERS									
Labs. - Phy. Sci. OK	22	11	51	16	20	46	19	9	53
Labs. - Bio. Sci. OK	13	11	60	29	16	33	24	10	41
Exams are Fair	40	14	1	40	11	2	33	20	2
Library accessible	72	8	6	77	2	3	66	10	5
Teachers will assist	68	5	5	65	3	2	56	10	2
Program for gifted OK	35	5	47	35	4	40	32	5	40
RULES, POLICIES									
Student Conduct Rules OK	32	13	17	41	8	11	24	21	8
Controversial Speaker Policy OK	40	7	38	43	2	37	37	15	20
Acad. Prob. & Dism. Rules OK	40	10	14	52	11	6	43	10	15
St. Particip. in Policy Making OK	17	17	26	19	23	27	28	16	17
Discipl. Proc., Policies OK	37	7	28	42	6	27	35	11	32
NON-ACAD. FACIL. & PROG.									
Provisions for St. Privacy OK	34	25	8	26	28	8	33	21	8
College Newspaper is Fair	23	28	15	39	25	9	38	25	7
Cultural Programs Adequate	32	11	23	33	14	16	30	16	22
Recreational Facil. Adequate	51	30	2	42	30	7	55	22	4
Social Program Successful	9	30	37	7	37	35	23	24	34
Food Service Satis.	18	51	6	13	43	9	21	44	4

*A=Percent who said "Agree"; D=Percent who said "Disagree"; N=Percent who said "No opinion".

**Percents do not add to 100 as those who said "Partly agree and partly disagree" are not included in table.

Under the Academic Matters factor, laboratory facilities are rated favorably with the exception of the College Transfer students' response to the Physical Science laboratory. No opinion responses indicating non-usage were highest among the Vocational-Technical students and greatest usage was indicated by the College Transfer group. Examinations, each group agreed, tended to be fair, with the highest disagreement coming from the General Studies group. Each group found library materials easily accessible and instructors generally available for assistance with classwork. Finally, each group felt that adequate provisions had been made for gifted students, through honors programs and the like.

Under the Rules and Policies factor, students in each group agree that rules governing the invitation of controversial speakers are reasonable. Likewise they view regulations governing academic probation and dismissal as sensible and disciplinary procedures and policies as fair. Regulations governing student conduct, although viewed as constructive by Vocational-Technical and College Transfer students, were less favorably rated by General Studies students. Twenty-four percent (24%) of the General Studies students feel that student conduct regulations are constructive, twenty-one percent (21%)

disagree, eight percent (8%) had no opinion, and forty-seven percent (47%) partly agreed and partly disagreed. The Vocational-Technical students have no consensus with respect to whether students have ample opportunities or not to participate in college policy making. The General Studies students indicate that such opportunities are present, whereas the College Transfer group seems to indicate that they are not.

Under the Non-Academic Facilities and Programs factor, students in each group are highly critical of the college social program. The college food service, in terms of quality, cost and efficiency, is viewed as unsatisfactory by a large percentage of students in each group. Whereas recreational facilities are rated as adequate by a majority of students, a sizable number of students in each group feel that sufficient recreational opportunities and facilities are not available. Provision for student privacy is viewed as adequate by a majority of Vocational-Technical and General Studies students, and as inadequate by a majority of students in the College Transfer program. A majority of students in the General Studies program and the College Transfer program agree that the college newspaper gives a balanced presentation of controversial events. Vocational-Technical students are more critical of the college newspaper. Finally, each group tends to agree that the cultural program is satisfactory in terms of quality and quantity.

To test the null hypothesis, that the three student groups did not differ significantly in their perception of selected college policies, practices and facilities, the t-test of the difference between two means was utilized. Table 15 presents t-ratios between student program groups for the factors identified above.

Table 15

t-Ratios for the Comparison of All Groups on Selected Policies, Practices and Facilities

	Academic Matters			Rules & Policies			Non-Academic Facilities-Programs		
Group	Mean	S.D.	t-ratio	Mean	S.D.	t-ratio	Mean	S.D.	t-ratio
Vo.-Tech.	6.66	2.5	1.93*	6.66	2.7	0.56	10.26	3.0	0.54
Coll. Tr.	7.42	2.7		6.44	2.3		10.51	2.9	
Vo.-Tech.	6.66	2.5	1.90	6.66	2.7	1.34	10.26	3.0	0.74
Gen. Stu.	7.45	3.0		7.21	2.7		9.90	3.4	
Coll. Tr.	7.42	2.7	0.07	6.44	2.3	2.01*	10.51	2.9	1.28
Gen. Stu.	7.45	3.0		7.21	2.7		9.90	3.4	

*Significant at the .05 level.

As demonstrated on Table 15 the Vocational-Technical students and the College Transfer students significantly differed in the responses to the Academic Matters factor. The other two group combinations, the Vocational Technical-General Studies and the College Transfer-General Studies, did not differ significantly on the Academic Matters Factor. On the Rules and Policies factor, one of the three combinations, the College Transfer and General Studies, significantly differ beyond the five percent level. On the third factor, Non-Academic Facilities and Programs, none of the three group combinations differ in a statistically significant manner. Again we accept the null hypothesis that no significant differences exist between the three groups in their general perception of college policies, practices and facilities as on seven of the nine comparisons significant differences were not found. We note, however, the significant differences found in comparing the Vocational-Technical and College Transfer students on the Academic Matters factor and in comparing the General Studies and College Transfer students on the Rules and Policies factor.

Relationships Between Success and Student Perceptions

The relationships between success and student perceptions are measured by utilizing Pearson's product-moment coefficient of correlation. Table 16 presents correlation coefficients between measures of success and student perception of student personnel services. Table 17 presents correlations between success measures and student ratings of selected college policies practices and facilities. Table 18 presents relationships between measures of success and student rating of instructors. The measures of success are: persistence and non-persistence, cumulative grade point average, and self-ratings of progress on the Intellectual-Humanistic scale, the Group Welfare scale, the Scientific-Independent scale, the Practical Status scale, the Personal Development scale, and the Communication scale.

Table 16

Correlations Between Measures of Success and Evaluation of Student Personnel Services

Measures of Success	Vocational Technical	College Transfer	General Studies
Persistence-Non-Persistence	+.10	+.06	+.01
Cumulative Grade Point Average	-.06	+.11	-.03
Intellectual-Humanistic	.15	.13	-.03
Group Welfare	-.06	-.07	.06
Scientific-Independent	-.12	.05	.09
Practical Status	-.08	.13	.15
Personal Development	.27*	-.11	.22*
Communication Skill	-.11	.13	.11

*Significant at the .05 level.

As demonstrated in Table 16 very low, non-significant correlations exist between group evaluations of student services and persistence and non-persistence. Very low, positive and negative, non-significant correlations exist between group evaluations of student services and cumulative grade point averages. The correlation ratios for the Vocational-Technical students and General Studies students on the Personal Development scale were significant at the .05 level. Correlations on the other self-rating scales are found to be non-significant.

Table 17 demonstrates non-significant correlations, both positive and negative, between all measures of success and student ratings of college rules, policies and facilities. The exception is the significant correlation found between the Personal Development scale and students in the Vocational-Technical program.

Table 18 demonstrates low non-significant correlations between student ratings of instruction and persistence and grade point average. Nine of the eighteen correlations on the self-rating scales are significant, and we note that each is positively related.

Table 17

Correlations Between Measures of Success and Ratings of College Rules, Policies, & Facilities

Measures of Success	Vocational Technical	College Transfer	General Studies
Persistence-Non-Persistence	+.01	+.03	+.07
Cumulative Grade Point Average	+.02	.00	-.02
Intellectual-Humanistic	.01	.13	-.09
Group Welfare	-.04	.07	-.18
Scientific-Independent	-.15	.12	.00
Practical-Status	-.06	.16	-.02
Personal Development	.32**	-.06	.00
Communication Skill	-.15	.08	.08

**Significant at the .01 level.

Table 18

Correlations Between Measures of Success and Rating of Instructor

Measures of Success	Vocational Technical	College Transfer	General Studies
Persistence-Non-Persistence	+.19	-.03	-.13
Cumulative Grade Point	.00	+.15	+.15
Intellectual-Humanistic	.19	.31	.14
Group Welfare	.31**	.24*	.14
Scientific-Independent	.11	.22*	.24*
Practical-Status	.08	.11	.19
Personal Development	.29*	.21*	.24*
Communication Skill9	.12	.28*	.13

*Significant at the .05 level.
**Significant at the .01 level.

From the evidence found in Tables 16, 17, and 18 we are able to accept the null hypothesis that no significant relationships exist between student success and student perception of student services, instructors, and selected college policies, rules and practices. In accepting the null hypothesis we note the significant and positive, but low, correlations which exist between student perception of classroom instructors and self-ratings of educational progress.

Summary and Discussion

The students in the General Studies program viewed both the Faculty Advising service and the Counseling services as worthwhile and valuable. Of those who rated the Orientation service, the majority found it worthwhile. The Remedial service was perceived to be of value by a substantial majority of those students in the General Studies program who utilized it. In general, instructors were rated quite positively. The food service was viewed as unsatisfactory by the General Studies students, as it was by each of the other groups. Very few meaningful relationships existed between the various measures of success and General Studies students' perceptions of student services, instructors, and college policies, rules and facilities.

The students in the College Transfer program found the Faculty Advising service to be of value, but the Counseling and Orientation services were viewed as being of little benefit. Classroom instructors were, for the most part, rated quite favorably. A significant number of College Transfer students felt that their participation in college policy making was inadequate, that there were inadequate provisions for student privacy, and that the college social program was not successful. Several significant relationships existed between self-rating success measures and College Transfer students' perception of classroom instructors. Other relationships between success measures and student assessments were non-significant.

The Vocational-Technical students found both the Faculty Advising service and the Counseling service to be valuable. As did the General Studies students and the College Transfer students, the students in the Vocational-Technical program rated their classroom instructors favorably. The college social program was viewed as unsuccessful, and a large number of students were critical of the college newspaper. Very few meaningful relationships existed between success measures and student perceptions of student services, instructors, and selected college policies, rules and facilities.

Comparing students in different curricula programs on the basis of their perception of various student services yielded several significant results. General Studies students found each service, Faculty Advising, Counseling, and Orientation, more worthwhile and valuable than did students in the other two programs. It is interesting to note that students in the General Studies program found each of these services significantly more valuable than did students in the College Transfer program. General Studies students and Vocational-Technical students did differ significantly in their perception of the student services, thus indicating the similar perceptions of those two groups. The Vocational-Technical students found the Faculty Advising service and the Counseling service significantly more worthwhile than did the College Transfer students.

Another significant finding resulted when comparing groups on the Class Conduct factor of Evaluation of Instructors. College Transfer students rated their instructors significantly more positively than did students in the General Studies program. Although several comparisons approached the 0.05 level of significance, this was the only statistically significant difference when students in differing curricular programs were compared.

When comparing student perceptions of selected college policies, practices and facilities, we note significant differences between the Vocational-Technical group and the College Transfer group on the Academic Matters factor. Likewise we see that College Transfer students and General Studies students differ significantly in their perception of appropriateness of various college policies and rules. Students in the College Transfer program found the rules and policies more appropriate than did the General Studies students.

The Hypotheses

The hypothesis concerning student personnel services was stated as Hypothesis I: There is no significant difference in the perception of the value of student services when comparing students by academic programs. The findings indicate that this hypothesis is, in general, not supported. Evidence from five of the nine measures specifies that there is a significant difference between the groups. However, non-support is not total, as four of the measures were not significant. More specifically, this hypothesis can be supported for comparisons involving College Transfer students but can not be supported for comparisons between Vocational-Technical students and General Studies students.

Concerning the classroom instructors, Hypothesis II was stated as follows: There is no significant difference in the perception of the effectiveness of classroom instructors when students are compared by academic program. This hypothesis is generally supported, as there were no significant differences on eight of the nine comparisons.

Hypothesis III was formulated as follows: There is no significant difference in the perception of the appropriateness of selected college policies, practices and facilities when students are compared by academic programs. The hypothesis is supported. Differences between groups existed on only two of nine comparisons.

Hypothesis IV concerning the relationship of success to student perceptions was stated as follows: There is no significant relationship between student success and student perception of student services, instructors and college policies, practices and programs. This hypothesis is supported, as correlations on all seventy-two measures were low and not significant.

In perspective we observe that of the twenty-seven comparisons made, four were significant at the 0.05 level of confidence and five were significant at the 0.01 level of confidence. Of the seventy-two relationships measured, not one was found to yield moderate or high correlations. Of the eight significant comparisons, three existed between the Vocational-Technical and College Transfer students and five existed between the College Transfer and General Studies students. That there were no significantly different comparisons between students in the Vocational-Technical program and students in the General Studies program is in itself significant.

CHAPTER V

Summary, Conclusions, And Recommendations

This chapter includes a summary of the research problem, purpose of the study, procedures utilized, and results obtained. Conclusions are based on information obtained in the course of this study. Recommendations are based upon the results of this study.

Summary Of Purpose And Procedures

Institutional assessment by students in different college programs was the focus of this study. It began by asking how well a single community college is succeeding in its quest to "fit" the student. No more reliable way to answer this question exists than to query the students themselves. Thus the central purpose of this study was to discover how students enrolled in different programs (Vocational-Technical, College Transfer, and General Studies) assess (1) the quality of instruction, (2) the value of various student services, and (3) specific college policies, practices and facilities. It was also the purpose of this study to determine if success rates, using various measures, were significantly related to the students' assessment of the college. Finally, this study is viewed as a model which other colleges can emulate in conducting institutional research self-studies. The benefits of this type of research are: (1) an overall student assessment of the college is accomplished; (2) a student assessment of specific academic programs is realized; (3) an understanding of student subgroup characteristics is acquired, and (4) relationships between student success and student assessment of the college can be examined.

The students selected to participate in the study were those who had enrolled at Wright College as full-time, beginning freshmen in the Fall semester of 1969. As full-time, beginning freshmen all students had maximum exposure to the institution and had no previous college experience. Likewise all students started college at the same time.

Sample groups were selected on the basis of the curriculum program. Thus, three groups of one hundred students each, representing differing academic programs, comprised the sample. The following are the subgroups included in this study:

1) Students from the Vocational-Technical program
2) Students from the College Transfer program
3) Students from the General Studies program

All student participants were asked to respond to specific items in the Institutional Self-Study Survey of Educational Status and Progress (ISS) (see Appendix B for a description of the survey). Packets containing a personalized cover letter, instructions, questionnaire and answer sheet, and a return addressed, postage-paid envelope were delivered to each participant. Telephone calls and follow-up letters aided in accomplishing a ninety percent return, of which eighty-nine percent were usable for research purposes. Additional information was available from school records and the ACT student data bank.

The subgroups' assessments of the various college environmental factors were compared using the t-test to determine the difference between subgroup means. T-ratios which were significant at the 0.05 level of confidence were noted. Correlations, utilizing Pearson's Product-Moment coefficient of correlation, were obtained to measure the relationship between student success and student perceptions. Correlations significant beyond the .05 level of confidence were noted.

Summary Of Results

Comparison of Student Subgroups' Assessment of Student Personnel Services. Generally the three student subgroups differed significantly in their evaluation of student services. More specifically, when comparing mean scores, College Transfer students rate the Faculty Advising service and the Student Counseling Service significantly lower than do the Vocational-Technical students and the General Studies students. It is also noted that the College Transfer group had the highest percentage of students who indicated non-use of these services. Conversely, the General Studies group, which rated both services of most value, had the highest percentage of use.

The Orientation service was rated significantly lower by students in the College Transfer program than by those in the General Studies program. The Remedial service was utilized by a large percentage of General Studies students and a significant number of Vocational-Technical students. Both groups rated the service positively.

Other student services were not used by a significant percentage of students, indicating either that such services are not available at Wright College or that, if they are available, a large majority of students do not relate to them.

Comparison of Student Subgroups' Assessment of Classroom Instructors.--The three student subgroups did not differ significantly in their assessment of classroom instructors. Generally each group described their instructors in positive terms. General Studies students did differ significantly from the College Transfer students on the Class Conduct scale. Specifically, General Studies students were more critical of their instructors in terms of distinguishing between major and minor points and in giving disorganized, superficial or imprecise treatment of their material.

Comparisons of Student Subgroups' Assessment of Selected College Policies, Practices and Facilities.--In general each student subgroup's assessment of policies, practices and facilities was favorable. Also, students in different academic programs did not differ significantly in their assessments. Specific differences existed between the College Transfer students and the Vocational-Technical students in their assessment of the laboratory facilities in biology and physical science. The Vocational-Technical students were more critical of the biology laboratories, whereas the College Transfer students were more critical of the physical science laboratory facilities.

Rules and policies governing student conduct and controversial speakers were generally assessed favorably by each group. However, General Studies students were the most critical, whereas College Transfer students were most supportive. Student participation in college policy making was viewed as unsatisfactory by College Transfer students, whereas a greater percentage of General Studies students viewed such participation as adequate.

The Food Service was judged as being most unsatisfactory by each student group. Likewise, the College Social Program was rated as unsuccessful by a significant percent of students in each program.

Relationship Between Success Measures and Student Perceptions.--Relationships between student perceptions and the various measures of success proved to be non-significant. Cumulative grade point averages and student assessments correlated very lowly and in only four of the nine relationships were correlations positive. Likewise, very low correlations were found between persistence-non-persistence and student assessment.

In examining the relationship between the various self-ratings of success and student assessment, several significant, positive correlations were found. Correlations between student group assessments and self-rating on the Personal Development scale were significant on five of the nine relationships measured. Likewise, a cluster of significant correlations were found between instructor assessment and success as measured on self-rating scales. This was particularly true for students in the College Transfer program. In interpreting the significant correlations one must realise that although positive, the correlations are in the low to low-moderate range. Thus, although we can say with a certain level of confidence (.05) that a significant positive relationship exists for such measures, we are unable to account for more than ten percent (10%) of the variance. No conclusions regarding the quality of these relationships can be made.

Student Profile.--In order to gain insight and to understand better the results of this study, descriptive profiles of each student subgroup were presented. It was found that the three groups differed in academic achievement as measured by the ACT composite score. As would be expected, the College Transfer group had the highest composite score and the General Studies students the lowest.

In responding to the importance of four types of college goals, each subgroup scored highest on the Vocational Scale. Previous research by Clark and Trow[1] has concluded that groups scoring high on the Vocational scale can be characterized as mobility-oriented sons and daughters of working and lower-middle class homes. For these students, many working as much as twenty hours a week, "college is largely off-the-job training, an organization of courses and credits leading to a diploma and a better job. To many of these hard-driven students, ideas and scholarship are as much a luxury and distraction as are sports and fraternities."[2] While each subgroup places a high premium on vocational goals, one understands that a large percentage of students in each group is undecided and uncertain as to vocational fields and role choices.

In terms of educational aspirations, it was found that the students in the General Studies program aspired to higher educational levels than did the students in the Vocational-

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[1] Burton Clark and Martin Trow, "College Peer Groups: The Organizational Context," in College Peer Groups, ed. by T. M. Newcomb and E. K. Wilson (Chicago: Aldine Publishing Company, 1966) pp. 20-70.

[2] Ibid., pp. 21-22.

Technical program. The aspirations of the General Studies students were quite similar to those students in the College Transfer program.

In viewing the various measures of success, it was found that the General Studies students were the least successful in terms of persistence-non-persistence and cumulative grade point average. The Vocational-Technical students exhibited the highest persistence rate, whereas students in the College Transfer program earned the highest grade point averages. The College Transfer students indicated the greatest degree of educational progress on four of the six self-rating scales.

Conclusions

The results of this study suggest several conclusions regarding students enrolled in differing college programs with respect to students' assessment of their college. The conclusions are enumerated below:

(1) In general, Wright College has succeeded in "fitting" the diverse student body it serves. Students in differing college programs tend to perceive various campus environmental factors in similar ways. Students in the

Vocational-Technical program and students in the General Studies program are quite similar in their perceptions of the institutional environment. Of the nine statistically significant differences found between group assessments of various environmental factors, none existed between these two groups. Exceptions to this general conclusion are discussed in item number four.

(2) Although the descriptive profiles of each student group differ appropriately, each group of students is characterized by uncertainty in terms of future vocational goals. The importance of this conclusion is further understood when one realizes that each student subgroup tends to view college primarily as a stepping stone to a better job and higher vocation.

(3) Students enrolled in the College Transfer program are the most successful students attending Wright College. Students enrolled in the General Studies program are the least successful students enrolled at Wright College.

(4) In evaluating the student personnel services, significant differences prevail among the compared groups. General Studies and Vocational-Technical students assessed the Counseling service and the Faculty Advising service as being

significantly more valuable and worthwhile than did the students enrolled in the College Transfer program. Perceived differences also existed between General Studies students and College Transfer students concerning the value of the Orientation program. Students in the General Studies program found this service beneficial and valuable, whereas College Transfer students rated the Orientation program of little benefit.

(5) The assessment of classroom instructors yielded no significant differences between students in different college programs. Students in each program found their instructors to be capable, understanding and, in general, expert teachers. Students in the General Studies program, however, tend to be more critical of their instructors than students in the other two programs.

(6) Significant differences were not found when student groups were compared on their assessment of selected college policies, practices and facilities. In general each group favorably rated college policies, rules and facilities.

(7) Students in each group were highly critical of the college social program. The college food service was rated as most unsatisfactory.

(8) Very low and insignificant relationships exist between student assessment of instructors, student services,

college policies, practices and facilities and cumulative grade point averages. Likewise, low and insignificant relationships exist between such assessments and persistence-non-persistence. These findings lend substance to the thesis of student objectivity and lack of bias in assessing various college environmental factors.

(9) Student self-ratings of educational progress and student assessment of classroom instructors seem to be positively related. Although positively related, the low correlations do not support predictive inferences.

Recommendations

The assumed validity of the collective perception approach, C. Robert Pace asserts,

> "lies in the argument that 'fifty million Frenchmen can't be wrong.' Regardless of individual behavior, or assorted physical facts such as money or size, the environment, in a psychological sense, is what it is perceived to be by the people who live in it. Even if one grants the possibility of self-deception on a large scale, the perceived reality, whatever it is,

> influences one's behavior and responses. Thus, realistically, what people think is true is true for them."[3]

Supported by the results of this collective perception study, the following recommendations are made:

(1) It is recommended that these findings be made available to the appropriate college staff members for their review and study. These data, along with other assessments of strengths, weaknesses, assets and liabilities of the college, should have full and open discussion on the part of college officials, deans, department chairmen, faculty and students. They, in turn, should direct their attention to suggesting ways in which the desired objectives of the college can be achieved. Efforts must be directed toward assisting in the implementation of any institution-wide program(s) which might be formulated.

(2) Based upon the percentage of undecided students and upon the perceived emphasis on vocational goals, it is recommended that the college make a concerted effort to assist students in formulating their vocational roles and plans. A

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[3] C. Robert Pace, College and University Environment Scales: Second Edition, Technical Manual (Princeton: Educational Testing Service, 1969), p. 7.

strong vocational guidance program can not be implemented solely in a centralized counseling center. Such a program must be decentralized, involving individual faculty members on the departmental level.

(3) The relative low ratings of the Counseling and Faculty Advising services by students in the Transfer program suggest a need for a more critical evaluation of these two services. It is recommended that the Counseling service and the Faculty Advising service for students in the College Transfer program be further evaluated by the college in terms of program objectives, functions, and organization.

(4) It is recommended that the college food service program be improved. The unanimous dissatisfaction with the college food service program suggests that vast improvements are necessary. It is further recommended that students be actively involved with faculty and staff in the process of examining and upgrading this service.

(5) The college social program is viewed as unsatisfactory. The college orientation program is rated as being of little benefit. It is recommended that each of these programs be reformed to relate directly to expressed student needs. Again it is pointed out that such efforts can only be successful if the total college is involved and supports changes deemed necessary.

(6) It is recommended that further research be conducted investigating the relationships between student self-ratings and environmental assessment. That positive correlations exist between such assessments and student self-ratings, particularly on the personal development scale, suggests intriguing, but as yet ill defined, implications for the college.

(7) As change takes place, and as recommendations are implemented, further institutional self-studies would be in order. Also, in that this study was limited to full-time, beginning freshmen, numerous other subgroups ought to participate in such investigations. It is thus recommended that periodic institutional self-studies be undertaken to assess the college. Other student groups, faculty groups, and administrators should be included in order to determine whether there are differences in perceptions of the college environment.

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APPENDIX A

ISS Questionnaire
Answer Sheet

Note: The entire survey questionnaire is presented here. Only items 1-69 were used in this study.

SURVEY

OF EDUCATIONAL STATUS AND PROGRESS

college student form

PREPARED BY THE
RESEARCH AND
DEVELOPMENT
DIVISION OF THE
AMERICAN COLLEGE
TESTING PROGRAM

IOWA CITY, IOWA

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SURVEY OF EDUCATIONAL STATUS AND PROGRESS

College Student Form

Educational Fields

Counseling and Guidance	01
Education Administration	02
Elementary Education	03
Physical Education	04
Secondary Education	05
Special Education	06
Education, Other Specialties	07

Social Science and Religious Fields

History	08
Home Economics	09
Library and Archival Science	10
Psychology	11
Social Work	12
Sociology	13
Theology and Religion	14
Social Science	
Area Studies	15
American Civilization	16
American Studies	17

Business, Political, and Persuasive Fields

Accounting	18
Advertising	19
Business Administration (4 years)	20
Business and Commerce (2 years)	21
Data Processing	22
Economics	23
Finance	24
Industrial Relations	25
Law	26
Merchandising and Sales	27
Military	28
Political Science, Government, or Public Administration	29
Foreign Services	30
International Relations	31
Public Relations	32
Secretarial Science	33

Scientific Fields

Anatomy	34
Anthropology	35
Archaeology	36
Astronomy	37
Biology or Genetics	38
Botany	39
Chemistry	40
Geography	41
Geology or Geophysics	42
Mathematics or Statistics	43
Meteorology	44
Oceonography	45
Physics	46
Physiology	47
Zoology or Entomology	48

Agriculture and Forestry

Agriculture	49
Fish and Game Management	50
Forestry	51
Soil Conservation	52

Health Fields

Dental Hygiene	53
Dentistry	54
Dietetics	55
Medicine	56
Medical Technology	57
Mortuary Science	58
Nursing	59
Occupational Therapy	60
Optometry	61
Osteopathy	62
Pharmacy	63
Physical Therapy	64
Veterinary Medicine	65
X-Ray Technology	66

Arts and Humanities

Arts and Sculpture	67
Architecture	68
Creative Writing	69
Drama and Theater	70
English and English Literature	71
Foreign Language and Literature	72
Journalism	73
Music	74
Philosophy	75
Radio-TV Communications	76
Speech	77
General Education or Liberal Arts (2 years)	78
Other Arts and Humanities	79

Engineering

Aeronautical	80
Agricultural	81
Architectural	82
Automotive	83
Chemical or Nuclear	84
Civil	85
Electrical or Electronic	86
Industrial	87
Mechanical	88
Other	89

Trade, Industrial, and Technical

Aviation	90
Construction	91
Drafting	92
Electricity and Electronics	93
Industrial Arts	94
Metal and Machine	95
Mechanical	96
Other Trade	97

My future field of training is not included in the fields listed above	98
Housewife	99
Undecided	00

Use No. 2 lead pencil. Mark all answers on the separate answer sheet.

1. From the list on the left page, find your major field. Mark the appropriate code number on your answer sheet. Indicate only one field. If you are undecided, mark "00" on your answer sheet and go on to the next question.
2. From the list on the left page, find the best description of your future vocation, and mark its code on your answer sheet. Again, if you are undecided about your future vocation, mark "00" on your answer sheet. If your future vocation is not included in these fields, mark "98" on your answer sheet; or if you anticipate your future vocation to be exclusively that of housewife, mark "99" on your answer sheet and skip Question 3.
3. Which of the following alternatives describes the main role you expect to play in your future vocation? (For example, if you want to be a physicist and work primarily as a researcher, you would mark "1." If you want to be a doctor who specializes in private practice, you would mark "5." An engineering major who plans to become a sales engineer should mark "4." A teacher who wants to become a principal should mark "3." An art major who plans to become a professional artist should mark "5," etc.)

Researcher or investigator *1*
Teacher or therapist *2*
Administrator or supervisor *3*
Promoter or salesman of services or products *4*
Practitioner, performer, or producer of services or products . *5*
None of the above *6*
Two or more roles *7*
Don't know or undecided *8*

4. What is the highest level of education you expect to complete?

High school diploma *0*
Vocational or technical program (less than two years) *1*
Junior college degree *2*
Bachelor's degree or equivalent ... *3*
One or two years of graduate or professional study (M.A., M.B.A., etc.) *4*
Doctor of philosophy or doctor of education (Ph.D. or Ed.D.) *5*
Doctor of medicine or dental surgery (M.D. or D.D.S.) *6*
Bachelor of laws (LL.B.) *7*
Bachelor of divinity (B.D.) *8*
Other *9*

Questions 5-16 describe college goals. Indicate the degree of importance you attach to each goal by using the following code:

Essential (a goal you feel you must accomplish) *1*
Very important *2*
Desirable (a goal of some importance, but less vital than those rated 1 or 2) *3*
Not important (a goal of little or no importance) *4*

Be sure to respond to every question.

5. To improve my ability to think and reason.
6. To broaden my intellectual interests and my understanding of the world.
7. To increase my appreciation of art, music, literature, and other cultural expressions.
8. To discover my vocational interests.
9. To attain specific skills that will be useful on a job.
10. To meet the academic requirements necessary to enter a profession.
11. To increase my effectiveness in interpersonal relations.
12. To learn how to be an effective leader.
13. To become more capable and interesting socially.
14. To learn how to deal with political or social injustice.
15. To develop more personal independence and self-reliance.
16. To find a cause or causes I can really believe in.

A number of college policies, practices or facilities are described in questions 17-34 below. Indicate your opinion of these as they apply to your college by using the following code:

Agree *1*
Partly agree and Partly disagree .. *2*
Disagree *3*
I have no opinion on the matter ... *N*

17. There is adequate provision for student privacy.
18. The regulations governing student conduct are constructive.

19. Rules governing the invitation of controversial speakers are reasonable.
20. The campus newspaper gives a balanced presentation to controversial events.
21. Laboratory facilities for the physical sciences are adequate.
22. Laboratory facilities for the biological sciences are adequate.
23. The cultural program (lectures, concerts, exhibits, plays) is satisfactory in terms of quality and quantity.
24. Sufficient recreational opportunities and facilities (bowling, swimming, etc.) are available.
25. Regulations governing academic probation and dismissal are sensible.
26. Examinations are usually thorough and fair.
27. Library materials are easily accessible.
28. Instructors are generally available for assistance with classwork.
29. Adequate provision is made for gifted students (e.g., honors program, independent study, undergraduate research, etc.).
30. Students have ample opportunity to participate in college policy-making.
31. The college social program (dances, parties, etc.) is successful.
32. Housing regulations (living in apartments, off-campus rooms, etc.) are reasonable.
33. Disciplinary procedures and policies are fair.
34. College food services are adequate in terms of quality, cost, and efficiency.

Questions 35-43 refer to services which are frequently provided by colleges. Describe your reaction to these services at your college by using the following code:

The service was extremely valuable to me *1*
I found the service to be worthwhile *2*
I received little benefit from the service *3*
I've never used this service or our college does not offer this service .... *N*

35. Faculty advising service (assistance in selecting courses, adjusting schedules, planning programs, etc.).
36. Counseling service (assistance in choosing a major, vocational planning, resolving personal problems, etc.).
37. Financial needs service (assistance in obtaining a scholarship, loan, part-time job, or assistance in budgeting and controlling expenses).
38. Extracurricular advising assistance (in getting started in activities or in making the most of extracurricular opportunities).
39. Orientation service (assistance in getting started in college — learning the ropes, getting acquainted, overcoming apprehensions).
40. Housing services (assistance in locating suitable housing).
41. Housing advisory services (assistance in dealing with roommate problems, advice in handling everyday concerns, programs designed to make the housing arrangement more educational and enjoyable).
42. Health service (assistance in dealing with illness or injury).
43. Remedial educational services (improvement of reading, study skills, spelling, etc.).

Questions 44-55 below list some statements describing possible outcomes of a college education. Indicate the degree to which you feel you have made progress on each of these outcomes by marking your answer sheet in accordance with the following code:

Substantial progress *1*
Some progress *2*
Not much progress *3*

44. Acquiring a broad cultural and literary education.
45. Acquiring vocational training — skills and techniques directly applicable to a job.
46. Acquiring background and specialization for further education in some professional, scientific, or scholarly field.
47. Understanding different philosophies, cultures, and ways of life.
48. Social development — gaining experience and skill in relating to other people.
49. Personal development — understanding one's abilities and limitations, interests, and standards of behavior.

50. Knowing how to participate effectively as a citizen in one's community and in wider areas

51. Developing an ability to write and speak clearly, correctly, and effectively.

52. Developing an ability to think critically and to understand the origin, nature, and limitations of knowledge.

53. Developing an appreciation and enjoyment of art, music, and literature.

54. Developing an understanding and appreciation of science and technology.

55. Improving prospects for making high income and gaining professional status.

Questions 56-69 ask you to describe the instructors you have had at this college. Use the following scale to indicate how frequently each statement is true:

A majority of my instructors 1
About half of my instructors 2
A minority of my instructors 3

56. Instructors give students ample opportunity to participate in discussion, ask questions, and express points of view.

57. Lectures are dry, dull, and monotonous.

58. Students are given an important voice in determining class objectives and procedures.

59. Instructors appear to be uneasy and nervous.

60. Faculty members have an unusual facility for communicating their knowledge to students.

61. Instructors criticize or embarrass students in the classroom.

62. Instructors present material in an entertaining (e.g., dramatic, humorous) manner.

63. Instructors give disorganized, superficial, or imprecise treatment to their material.

64. Instructors give personal opinions or describe personal experiences.

65. Instructors don't seem to care whether class material is understood or not.

66. Out-of-class assignments (readings, papers, etc.) are reasonable in length.

67. Insufficient distinction is made between major ideas and less important details.

68. Instructors relate course material to contemporary problems.

69. Instructors seem to be "out of touch" with student life.

Questions 70-99 refer to your use of leisure time while you have been attending college. If, while attending college, you have engaged in the activity ON YOUR OWN, i.e., NOT AS A PART OF A CLASS ASSIGNMENT, mark the Y ("Yes") response. If you cannot recall having participated in the activity while in college (except, perhaps, as part of an assignment), mark the N ("No") response.

70. Attempted to invent something.

71. Read some poetry.

72. Discussed merits of political-economic systems (e.g., communism, socialism) with friends.

73. Attended a scientific lecture.

74. Visited an art exhibit.

75. Discussed world or national political problems (candidates, issues) with friends.

76. Attended a scientific exhibit.

77. Tried some sketching, drawing, or painting.

78. Watched four or more TV news specials in a year.

79. Read a technical journal or scientific article.

80. Attended a poetry reading or literary talk.

81. Discussed social issues (e.g., civil rights, pacificism) with friends.

82. Attempted to solve mathematical puzzles.

83. Attended a stage play.

84. Discussed campus issues with friends.

85. Attempted to develop a new scientific theory.

86. Read six or more articles a year in *Atlantic, Commonweal, Harpers,* and/or *Saturday Review.*

87. Attended a lecture on a current social, economic, or political problem.

88. Discussed a scientific theory or event with friends.

89. Discussed art or music with friends.

90. Read the editorial column of a newspaper at least once a week.
91. Devised a mathematical puzzle.
92. Discussed philosophy or religion with friends.
93. Read an article or book analyzing in depth a political or social issue.
94. Regularly read popular accounts of scientific advances (in *Time*, *Newsweek*, etc.).
95. Discussed plays, novels, or poetry with friends.
96. Read a biography or autobiography of a political or social reform leader.
97. Explained or illustrated a scientific principle to someone.
98. Attended a music recital or concert.
99. Read a book on psychology, sociology, or history.

Questions 100-199 also deal with experiences you may have had in college. They are grouped into ten lists of "out-of-class" accomplishments (Leadership, Social Participation, etc.); each list contains ten items which describe specific accomplishments or awards.

Read the items in each list. Then indicate which ones are true of you by blackening the appropriate space or spaces on your answer sheet. If on a given list none of the ten items are true for you, blacken the first column on your answer sheet ("None") and go on to the next list.

List 1. Leadership

100. Elected to one or more student offices.
101. Appointed to one or more student offices.
102. Active member of four or more student groups.
103. Elected president of class (freshman, sophomore, etc.) in any year of college.
104. Served on a student-faculty committee or group.
105. Elected or appointed as a member of a campus-wide student group, such as student council, student senate, etc.
106. Served on governing board or executive council of a student group.
107. Elected as one of the officers of a class (freshman, sophomore, etc.) in any year of college.
108. Elected president of a "special interest" student club, such as psychology club, mountain climbing club, etc.
109. Received an award or special recognition of any kind for leadership.

List 2. Social Participation

110. Actively campaigned to elect another student to a campus office.
111. Organized a college political group or campaign.
112. Worked actively in an off-campus political campaign.
113. Worked actively in a student movement to change institutional rules, procedures, or policies.
114. Initiated or organized a student movement to change institutional rules, procedures, or policies.
115. Participated in a student political group (Young Democrats, Young Republicans, etc.).
116. Participated in one or more demonstrations for some political or social goal, such as civil rights, free speech for students, states' rights, etc.
117. Wrote a "letter to the editor" regarding a social or civic problem.
118. Wrote a letter to a state legislator or U.S. representative or senator about pending or proposed legislation.
119. Worked actively in a special study group (other than a class assignment) for the investigation of a social or political issue.

List 3. Art

120. Won a prize or award in art competition (drawings, painting, sculpture, ceramics, architecture, etc.)
121. Exhibited or published at my college one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
122. Had drawings, photographs, or other art work published in a public newspaper or magazine.

123. Entered an artistic competition of any kind.
124. Produced on my own (not as part of a course) one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
125. Exhibited or published not at my college one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
126. Sold one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
127. Own a collection of art books, paintings, or reproductions.
128. Designed, made, and sold handicraft items such as jewelry, leathercraft, etc.
129. Created or designed election posters, program covers, greeting cards, stage settings for a play, etc.

List 4. Social Service

130. Worked actively in a student service group or organization.
131. Worked actively on a charity drive.
132. Worked as a volunteer aide in a hospital, clinic, or home.
133. Served as a big brother (sister) or advisor to one or more foreign students.
134. Organized a student service group.
135. Worked actively in an off-campus service group or organization.
136. Worked as a volunteer on a campus or civic improvement project.
137. Participated in a program to assist children or adults who were handicapped mentally, physically, or economically.
138. Voluntarily tutored a fellow student.
139. Received an award or recognition for any kind of campus or community service.

List 5. Scientific

140. Built scientific equipment (laboratory apparatus, a computer, etc.) on my own (not as a part of a course).
141. Was appointed a teaching or research assistant in a scientific field.
142. Received a prize or award for a scientific paper or project.
143. Gave an original paper at a convention or meeting sponsored by a scientific society or association.
144. On my own (not as part of a course), carried out or repeated one or more scientific experiments, recorded scientific observations of things or events in the natural setting, or assembled and maintained a collection of scientific specimens.
145. Author or co-author of scientific or scholarly paper published (or in press) in a scientific journal.
146. Invented a patentable device.
147. Member of a student honorary scientific society.
148. Entered a scientific competition of any kind.
149. Wrote an unpublished scientific paper (not a course assignment).

List 6. Humanistic-Cultural

150. Developed and followed a program of reading of poetry, novels, biographies, etc. on my own (not course assignment).
151. Member of a student honorary society in the humanities (literature, philosophy, language, etc.).
152. Built a personal library around a core collection of poetry, novels, biographies, etc.
153. Attended a convention or meeting of a scholarly society in the humanities (literature, philosophy, language, etc.).
154. Author or joint author of an original paper published (or in press) in a scholarly journal in the humanities (literature, philosophy, language, etc.).
155. Read scholarly journals in the humanities on my own (not as a course assignment).
156. Read one or more "classic" literary works on my own (not course assignment).
157. Wrote on my own (not a course assignment) an unpublished scholarly paper in the humanities.
158. Won a prize or award for work in the humanities.

159. Gave an original paper at a convention or meeting sponsored by a scholarly society in the humanities.

List 7. Religious Service

160. Active member of a student religious group.
161. Organized or reorganized a student religious group.
162. Active member of an off-campus religious group (not a church).
163. Held one or more offices in a religious organization.
164. Led one or more religious services.
165. Taught in a church, synagogue, etc.
166. Attended one or more religious retreats, conferences, etc.
167. Participated in a religious study group.
168. Worked to raise money for a religious institution or group.
169. Did voluntary work for a religious institution or group.

List 8. Music

170. Composed or arranged music which was publicly performed.
171. Publicly performed on two or more musical instruments (including voice) which do not belong to the same family of instruments.
172. Conducted music which was publicly performed.
173. Presented a solo recital in public which was not under the auspices of a college or church.
174. Attained recognition in the form of an award or scholarship in a national or international music competition.
175. Have been paid for performing as a professional music teacher on a continuing basis.
176. Composed or arranged music which has been published.
177. Attained a first division rating in a state or regional solo music contest.
178. Have been paid for performing as a professional musician on a continuing basis.
179. Author or co-author of a book, article, or criticism bearing on the general subject of music.

List 9. Writing

180. Had poems, stories, essays, or articles published in a public (not college) newspaper, anthology, etc.
181. Wrote one or more plays (including radio or TV plays) which were given public performance.
182. Was feature writer, reporter, etc. for college paper, annual, magazine, anthology, etc.
183. Was editor for college paper, annual, magazine, anthology, etc.
184. Did news or feature writing for public (not college) newspaper.
185. Had poems, stories, essays, or articles published in a college publication.
186. Wrote an original, but unpublished piece of creative writing on my own (not as part of a course).
187. Won a literary prize or award for creative writing.
188. Systematically recorded my observations and thoughts in a diary or journal as resource material for writing.
189. Member of student honorary group in creative writing or journalism.

List 10. Speech and Drama

190. Participated in one or more contests in speech, debate, extemporaneous speaking, etc.
191. Placed second, third, or fourth in a contest in speech, debate, extemporaneous speaking, etc.
192. Won one or more contests in speech, debate, extemporaneous speaking, etc.
193. Had one or more minor roles in plays produced by my college or university.
194. Had one or more leads in plays produced by my college or university.
195. Had one or more leads or minor roles in plays not produced by my university.
196. Gave dramatic performance on radio or TV program.
197. Received an award for acting or other phase of drama.
198. Gave a recital in speech.
199. Participated in a poetry reading, play reading, dramatic production, etc. (not a course assignment).

MAKE NO MARKS OR SMUDGES NEAR THESE RECTANGLES

SIDE 1

SURVEY OF EDUCATIONAL STATUS AND PROGRESS

MRC ANSWER SHEET

AMERICAN COLLEGE
TESTING PROGRAM

COLLEGE STUDENT
FORM

NAME OF COLLEGE	Please Print	COLLEGE CODE	
YOUR NAME	Please Print Last First		
SOCIAL SECURITY NUMBER	☐☐☐ — ☐☐ — ☐☐☐☐		

SEX	CLASSIFICATION	HAVE YOU TRANSFERRED 15 OR MORE CREDIT HOURS FROM ANOTHER COLLEGE?	CUMULATIVE GRADE-POINT AVERAGE AT THIS COLLEGE A=4.0 D=1.0 B=3.0 F=0.0 C=2.0
○ Male ○ Female	○ Freshman ○ Sophomore ○ Junior ○ Senior ○ Graduate ○ Professional ○ Unclassified	○ Yes ○ No	○ 3.80 - 4.00 ○ 3.50 - 3.79 ○ 3.20 - 3.49 ○ 2.90 - 3.19 ○ 2.60 - 2.89 ○ 2.30 - 2.59 ○ 2.00 - 2.29 ○ 1.70 - 1.99 ○ 1.40 - 1.69 ○ Below 1.40

1 MAJOR FIELD			2 FUTURE VOCATION			3 VOCATIONAL ROLE	4 LEVEL OF ED. ASPIRATION
○	0	○	○	0	○		0 ○
○	1	○	○	1	○	1 ○	1 ○
○	2	○	○	2	○	2 ○	2 ○
○	3	○	○	3	○	3 ○	3 ○
○	4	○	○	4	○	4 ○	4 ○
○	5	○	○	5	○	5 ○	5 ○
○	6	○	○	6	○	6 ○	6 ○
○	7	○	○	7	○	7 ○	7 ○
○	8	○	○	8	○	8 ○	8 ○
○	9	○	○	9	○		9 ○

5 ○1 ○2 ○3 ○4
6 ○1 ○2 ○3 ○4
7 ○1 ○2 ○3 ○4
8 ○1 ○2 ○3 ○4
9 ○1 ○2 ○3 ○4
10 ○1 ○2 ○3 ○4
11 ○1 ○2 ○3 ○4
12 ○1 ○2 ○3 ○4
13 ○1 ○2 ○3 ○4
14 ○1 ○2 ○3 ○4
15 ○1 ○2 ○3 ○4
16 ○1 ○2 ○3 ○4

17 ○1 ○2 ○3 ○Z
18 ○1 ○2 ○3 ○Z
19 ○1 ○2 ○3 ○Z
20 ○1 ○2 ○3 ○Z
21 ○1 ○2 ○3 ○Z
22 ○1 ○2 ○3 ○Z
23 ○1 ○2 ○3 ○Z
24 ○1 ○2 ○3 ○Z
25 ○1 ○2 ○3 ○Z
26 ○1 ○2 ○3 ○Z
27 ○1 ○2 ○3 ○Z
28 ○1 ○2 ○3 ○Z
29 ○1 ○2 ○3 ○Z
30 ○1 ○2 ○3 ○Z
31 ○1 ○2 ○3 ○Z
32 ○1 ○2 ○3 ○Z
33 ○1 ○2 ○3 ○Z
34 ○1 ○2 ○3 ○Z

35 ○1 ○2 ○3 ○Z
36 ○1 ○2 ○3 ○Z
37 ○1 ○2 ○3 ○Z
38 ○1 ○2 ○3 ○Z
39 ○1 ○2 ○3 ○Z
40 ○1 ○2 ○3 ○Z
41 ○1 ○2 ○3 ○Z
42 ○1 ○2 ○3 ○Z
43 ○1 ○2 ○3 ○Z

44 ○1 ○2 ○3
45 ○1 ○2 ○3
46 ○1 ○2 ○3
47 ○1 ○2 ○3
48 ○1 ○2 ○3
49 ○1 ○2 ○3
50 ○1 ○2 ○3
51 ○1 ○2 ○3
52 ○1 ○2 ○3
53 ○1 ○2 ○3
54 ○1 ○2 ○3
55 ○1 ○2 ○3

56 ○1 ○2 ○3
57 ○1 ○2 ○3
58 ○1 ○2 ○3
59 ○1 ○2 ○3
60 ○1 ○2 ○3
61 ○1 ○2 ○3
62 ○1 ○2 ○3
63 ○1 ○2 ○3
64 ○1 ○2 ○3
65 ○1 ○2 ○3
66 ○1 ○2 ○3
67 ○1 ○2 ○3
68 ○1 ○2 ○3
69 ○1 ○2 ○3

70 ○Y ○Z
71 ○Y ○Z
72 ○Y ○Z
73 ○Y ○Z
74 ○Y ○Z
75 ○Y ○Z
76 ○Y ○Z
77 ○Y ○Z
78 ○Y ○Z
79 ○Y ○Z
80 ○Y ○Z
81 ○Y ○Z
82 ○Y ○Z
83 ○Y ○Z
84 ○Y ○Z
85 ○Y ○Z
86 ○Y ○Z
87 ○Y ○Z
88 ○Y ○Z
89 ○Y ○Z
90 ○Y ○Z
91 ○Y ○Z
92 ○Y ○Z
93 ○Y ○Z
94 ○Y ○Z
95 ○Y ○Z
96 ○Y ○Z
97 ○Y ○Z
98 ○Y ○Z
99 ○Y ○Z

LIST 1
LEADERSHIP

○ NONE

100 True ○
101 True ○
102 True ○
103 True ○
104 True ○
105 True ○
106 True ○
107 True ○
108 True ○
109 True ○

LIST 2
SOCIAL PARTICIPATION

○ NONE

110 True ○
111 True ○
112 True ○
113 True ○
114 True ○
115 True ○
116 True ○
117 True ○
118 True ○
119 True ○

LIST 3
ART

○ NONE

120 True ○
121 True ○
122 True ○
123 True ○

LIST 3 Cont.

124 True ○
125 True ○
126 True ○
127 True ○
128 True ○
129 True ○

LIST 4
SOCIAL SERVICE

○ NONE

130 True ○
131 True ○
132 True ○
133 True ○
134 True ○
135 True ○
136 True ○
137 True ○
138 True ○
139 True ○

LIST 5
SCIENTIFIC

○ NONE

140 True ○
141 True ○
142 True ○
143 True ○
144 True ○
145 True ○
146 True ○
147 True ○
148 True ○
149 True ○

LIST 6
HUMANISTIC-CULTURAL

○ NONE

150 True ○
151 True ○
152 True ○
153 True ○
154 True ○
155 True ○
156 True ○
157 True ○
158 True ○
159 True ○

LIST 7
REGLIGIOUS SERVICE

○ NONE

160 True ○
161 True ○
162 True ○
163 True ○
164 True ○
165 True ○
166 True ○
167 True ○
168 True ○
169 True ○

LIST 8
MUSIC

○ NONE

170 True ○
171 True ○
172 True ○
173 True ○

LIST 8 Cont.

174 True ○
175 True ○
176 True ○
177 True ○
178 True ○
179 True ○

LIST 9
WRITING

○ NONE

180 True ○
181 True ○
182 True ○
183 True ○
184 True ○
185 True ○
186 True ○
187 True ○
188 True ○
189 True ○

LIST 10
SPEECH AND DRAMA

○ NONE

190 True ○
191 True ○
192 True ○
193 True ○
194 True ○
195 True ○
196 True ○
197 True ○
198 True ○
199 True ○

ADDITIONAL QUESTIONS

	1	2	3	4	5
200	○	○	○	○	○
201	○	○	○	○	○
202	○	○	○	○	○
203	○	○	○	○	○
204	○	○	○	○	○
205	○	○	○	○	○
206	○	○	○	○	○
207	○	○	○	○	○
208	○	○	○	○	○
209	○	○	○	○	○

SIDE 2

SURVEY OF EDUCATIONAL STATUS AND PROGRESS

MAKE NO MARKS OR SMUDGES NEAR THESE RECTANGLES

MRC ANSWER SHEET

APPENDIX B

Description and Development of Items Used in Research Study

Educational-Occupational Plans and Aspirations (Items 1-4)

These items were taken from the Student Profile Section of the ACT Test Battery. Each person is asked to report his academic major, his planned vocation and vocational role, and his educational aspiration. The purpose is not only to note the students' present outlooks and goals in this area, but to see the direction and amount of change that has taken place in various groups of students since college entrance.

College Goals (Items 5-16)

For this section, twelve college goals are grouped into four categories representing the four college student subcultures postulated by Trow.[1] Cluster correlation analysis placed the first three items in the academic goals category, the next three in the vocational goals category, the third three in the social or collegiate goals category, and the final three in the nonconventional or idealism category. Each student's responses are weighted from zero to three (not important = zero, desirable = 1, very important = 2, essential = 3), which means that each of the four goals scales can vary from zero to nine. A higher score indicates that greater importance is placed on goals of that type.

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[1] The following research studies describe the development of student subcultures:

Martin Trow, "The Campus Viewed as Culture," in Research on College Students, ed. by H. T. Sprague (Boulder, Colorado: Western Interstate Commission for Higher Education, 1960).

Martin Trow, "Student Subcultures and Administrative Action," in Personality Factors on the College Campus, Review of a Symposium, ed. by R. L. Sutherland, W. H. Holtzman, E. A. Harle, and B. K. Smith (Austin, Texas: The Hogg Foundation for Mental Health, 1962).

Burton Clark and Martin Trow, "The Organization Context," in College Peer Groups, ed. by T. M. Newcomb and E. T. Wilson (Chicago: Aldine Publishing Company, 1966).

College Policies, Practices, and Facilities (Items 7-34)

No research literature was available to guide the development of items in this section of the questionnaire. Therefore, texts in higher education and student personnel work were the only sources that could be consulted. Preliminary items were developed based on the literature review and on Dr. Hoyt's wide experience in this area. Subsequent modification were made in the items after consultation with various college administrators, professors, and members of accreditation teams.

Each item in this section of the questionnaire is a positively worded statement about particular college policies, practices, or facilities. The possible student responses are: agree, partly agree and partly disagree, disagree, I have no opinion on the matter.

Student Personnel Services (Items 35-43)

Once again the lack of research literature necessitated complete reliance on student personnel texts, the author's own experiences, and consultation with various experts.

Those who have used each of the services are asked whether the service was extremely valuable, worthwhile, or of little benefit to them. For those who have not used a service, response possibilities have been modified in the new ISS questionnaire. In the new questionnaire version, the statement "I've never used this service or our college does not offer this service" was separated into two response choices. The statement that a service was never used implies knowledge that such a service exists. A large number of students responding that the college does not offer this service, when in fact it is offered, implies that publicity and promotion may be lacking for the service. Comparing the proportion here with the proportion responding that the service was of little benefit may add further insights.

Progress Toward Attaining Possible College Goals (Items 44-55)

The items in this section were suggested by research by Pace and Baird.[2] The assumption is that one can learn valuable things about a student's development simply by asking him to evaluate it. When Pace and Baird related the various student-reported attainments in college to the different campus environmental emphases and to student personality characteristics, the patterns obtained supported such an assumption.

Pace and Baird's achievement categories were used to classify 10 of the 12 self-ratings. The categories, and the specific items included in each, are as follows:

(1) Intellectual, humanistic, aesthetic - Items 44, 47 and 53

(2) Group welfare - Items 48 and 50

(3) Scientific, independent - Items 46, 52, and 54

(4) Practical, status-oriented - Items 45 and 55

The other two items are, in effect, single item scales. While they do not correspond to one of Pace and Baird's general achievement categories, they do represent commonly accepted goals of higher education. They are:

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[2] C. Robert Pace and Leonard L. Baird, "Attainment Patterns in the Environmental Press of College Subcultures," in College Peer Groups, ed. by T. M. Newcomb and E. K. Wilson (Chicago: Aldine Publishing Company, 1966), pp. 215-244.

(5) Personal development - Item 49

(6) Communication skill - Item 51

The student is asked to indicate the degree to which he feels he has made progress on each of the 12 possible college outcomes. For each he is to respond whether he has made substantial progress, some progress, or not much progress.

Instructor Behavioral Ratings (Items 56-69)

The ISS instructor behavior items were selected on the basis of two factor analytic studies, one by Isaacson *et. al*.[3] and one by Solomon[4] (1966). These studies were designed to describe the dimensions of college teaching performance. As such, they provide guidelines as to the type of teacher behavior which should be sampled in order to obtain a comprehensive characterization.

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[3] R. L. Isaacson, W. J. McKeachie, and J. E. Milholland, *Research on the Characteristics of Effective College Teaching*, U. S. Office of Health, Education and Welfare, Office of Education, Cooperative Research Project No. 850 (Ann Arbor, Michigan: University of Michigan, 1964).

[4] D. Solomon, "Teacher Behavior Dimensions, Course Characteristics, and Student Evaluation of Teachers," *American Educational Research Journal*, 3 (1966), 35-47.

The Isaacson, _et. al._ study was a replication and extension of a study conducted by Gibb[5] about ten years before. This more comprehensive study generally confirmed some factors which had been identified in a number of previous studies by other researchers.

The study by Solomon was a follow-up of an earlier factor analytic study.[6] The results were similar even though large differences existed between them in method of data collection and in the samples of courses and instructors.

It should also be noted that Solomon explored a variety of instruments: observers' global ratings, scoring of a number of categories of teachers' and students' speech from tape recordings of class sessions, questionnaires in which teachers described their objectives and motives while teaching, and a questionnaire in which students rated a wide variety of teacher behaviors. Analyses across instruments suggested that adequate and economical measures of teacher behavior could be obtained from a student questionnaire alone.

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[5] C. A. Gibb, "Classroom Behavior of College Teachers," _Educational and Psychological Measurement_, 15 (1955), 254-263.

[6] D. Solomon, W. E. Bezdek, and L. Rosenberg, _Teaching Styles and Learning_ (Chicago: Center for the Study of Liberal Education for Adults, 1963).

Ten of the ISS instructor behavior factors were denoted by Solomon, with four additional ones being contributed by McKeachie and associates. One item is given for each of the fourteen factors. To reduce response bias, every other item is a positive statement about the instructors, and each is interspaced with a negatively oriented statement.

The first ten items relate to factors described by Solomon.[7] These factors, which item loads on each, and whether it is a negatively or positively worded statement about the instructors, are as follows:

(1) Lecturing vs. encouragement of broad, expressive student behavior - Item 56

(2) Energy, facility of communication vs. lethargy, vagueness - Item 57

(3) Criticism, disapproval, hostility vs. tolerance - Item 61

(4) Control, factual emphasis vs. permissiveness - Item 58

(5) Warmth, approval vs. coldness - Item 65

(6) Obscurity, difficulty of presentation vs. clarity - Item 60

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[7] Solomon, Behavior Dimensions, pp. 37-40.

(7) Dryness vs. flamboyance - Item 62

(8) Precision, organization vs. informality - Item 63

(9) Nervousness vs. relaxation - Item 59

(10) Impersonality vs. personal expression - Item 64

Isaacson and associates found six stable factors which were consistent over sexes, different semesters, different groups of introductory psychology students, and different psychology teachers. Using different items, and for introductory economics courses, four of the same factors were derived. It was suggested that these four factors might be fundamental dimensions of classroom instruction in general because all four appeared in studies using different forms for different academic areas. The four factors, which are represented by ISS items, are as follows:

(1) Skill - Item 68

(2) Overload - Item 66

(3) Structure - Item 67

(4) Rapport - Item 69

Though they appear to provide a good representation of the major behavioral options open to teachers, the 14 item ratings were not intended to be direct evaluations of teaching effectiveness. Rather, they simply describe an institution's instructional trends. Such descriptions should prove valuable in examining whether differences in student development are associated with certain types of instructors' behaviors.

APPENDIX C

1. Letter to Students
2. Instructions

WILBUR WRIGHT COLLEGE
A CAMPUS OF
CHICAGO CITY COLLEGE

3400 NORTH AUSTIN AVENUE
CHICAGO, ILLINOIS 60634
SPRING 7-7900

May 4, 1970

Wright College is striving to improve the quality of education services offered to the community. One reliable way of assessing the College is to look at it through the eyes of its students. For this reason, you have been selected to participate in this important study.

The time involved in this project will be approximately twenty minutes. No preparation on your part is needed and all of your responses will be kept strictly confidential. We ask that you complete and return the enclosed survey as soon as possible.

Upon completion of the survey, please return it to the office of the President, Room 114. Results of the study will be released next fall and a copy will be sent to you at your home address.

Thank you for your time and cooperation in contributing to this project.

Sincerely yours,

Ralph E. Smith
Director of Research and Evaluation

R. Edmund Dolan
Research Assistant

INSTRUCTIONS

PLEASE READ PLEASE READ

In completing the Survey please observe the following:

1. Use a PENCIL to indicate answers on the answer sheet.

2. Do not FOLD the answer sheet at any time.

3. Look at Name and Social Security number. If incorrect, please correct. IGNORE the rest of the information requests (sex, class, G.P.A., etc.) and go to Question One (1), Major Field.

4. COMPLETE each question, one (1) through sixty-nine (69). Questions seventy (70) through two hundred (200) are optional. If time permits, please complete.

5. When you have completed the survey, please place the survey form and answer sheet in the envelope and return to:

   The Office of the President
   Wright College
   Room 114
   3400 N. Austin Avenue
   Chicago, Illinois 60634

6. If you have any additional comments, please write on a separate piece of paper. We welcome any additional comments you may have.

7. REMEMBER: Use pencil.
   Do not fold answer sheet.
   Complete all questions 1-69 (the rest are optional).
   Return as soon as possible.

If you have any questions, please call 269-8280 (day)
973-0174 (night)

and ask for Ed Dolan.

Again -- thank you!

APPENDIX D

Memo to Faculty

Memo from RALPH SMITH

Date May 5, 1970

To: Faculty

Dear Colleague,

We are asking some students in your class to cooperate in a study that will give us some important information about student attitudes and beliefs.

Will you please distribute the attached packets. No directions from you to the student are necessary but encouragement from you to the student to take the required 15 minutes to fill out the questionnaire and return it promptly would be appreciated.

Thank you for your cooperation.

Ralph Smith

RS:fo

APPENDIX E

Follow-Up Letter to Students

WRIGHT COLLEGE
3400 N. Austin
Chicago, Ill. 60634

Office of the President
Room 114

Dear

During the past few weeks you received a survey which essentially asked your evaluation of Wright College.

Our records show that your survey and answer sheet are among the few we have not received in return.

We would appreciate your efforts in returning the survey and answer sheet immediately.

If you have already mailed the survey and answer sheet, our sincere thanks to you.

Sincerely,

R. Edmund Dolan

RED:mhs

APPENDIX F

T-Test Formula

T-Test Formula

$$t = \frac{M_1 - M_2}{\sqrt{\left(\frac{N_1 \sigma_1{}^2 + N_2 \sigma_2{}^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 N_2}\right)}}$$

M_1 = Mean score of first sample group

M_2 = Mean score of second sample group

N_1 = Number of subjects in first sample group

N_2 = Number of subjects in second sample group

$\sigma_2 1$ = Standard deviation of first sample group

$\sigma_2 2$ = Standard deviation of second sample group

APPENDIX G

Pearson's Product Moment Coefficient Correlation Formula

Product Moment Coefficient Correlation

$$r_{xy} = \frac{N\Sigma XY - (\Sigma X)\ (\Sigma Y)}{N\Sigma X^2 - (\Sigma X)^2 \quad N\Sigma Y^2 - (\Sigma Y)^2}$$

N = Number of subjects

ΣX = Sum of first variable

ΣX^2 = Sum of the squares of first variable

ΣY = Sum of second variable

ΣY^2 = Sum of the squares of second variable

ΣXY = Sum of the cross products

BIBLIOGRAPHY

Books

American College Testing Program, Inc. Institutional Self Study Manual. Iowa City: American College Testing Program, 1969.

Astin, Alexander W. Who Goes Where To College. Chicago: Science Research Associates, 1965.

Clark, Burton and Trow, Martin. "The Organization Context." College Peer Groups. Edited by T. M. Newcomb and E. T. Wilson. Chicago: Aldine Publishing Company, 1966.

Cross, Patricia A. The Junior College Student: A Research Description. Princeton: Educational Testing Service, 1968.

Darley, John G. Promise and Performance: A Study of Ability and Achievement in Higher Education. Berkeley: University of California Press, 1962.

Dressel, Paul L., and Mayhew, Lewis. General Education: Exploration and Evaluation. Washington: American Council on Education, 1954.

Eddy, Edward D. The College Influence on Student Character. Washington: American Council on Education, 1959.

Feldman, Kenneth, and Newcomb, Theodore. The Impact of College on Students. San Francisco: Jossey-Bass, Inc., 1969.

Gleazer, Edmund. This Is The Community College. Boston: Houghton Mifflin Co., 1968.

Hoyt, Donald P., and Munday, Leo A. Your College Freshman. Iowa City: American College Testing Program, 1968.

Jacob, Philip E. Changing Values in College. New York: Harper and Brothers, 1957.

Lazarsfeld, Paul F., and Thielens, Wagner. The Academic Mind: Social Scientists in a Time of Crisis. Glencoe, Illinois: The Free Press, 1958.

Lenning, Oscar T. The Institutional Self-Study Service Manual. Iowa City: American College Testing Program, 1970.

Linn, Robert; Davis, Junius; and Cross, Patricia. A Guide to Research Design: Institutional Research Program for Higher Education. Princeton: Educational Testing Service, 1965.

Medsker, Leland D. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Company, Inc., 1960.

McConnell, Thomas R., and Heist, Paul. "The Diverse College Student Population." The American College. Edited by Nevitt Sanford. New York: John Wiley and Sons, Inc., 1962.

Pace, C. Robert. College and University Environment Scales. Preliminary Technical Manual. Princeton: Educational Testing Service, 1969.

________. College and University Environment Scales: Second Edition, Technical Manual. Princeton: Educational Testing Service, 1969.

________, and Baird, Leonard L. "Attainment Patterns in the Environmental Press of College Subcultures." College Peer Groups. Edited by T. M. Newcomb and E. K. Wilson. Chicago: Aldine Publishing Company, 1966.

Peterson, Richard. College Student Questionnaires and Technical Manual. Princeton: Educational Testing Service, 1965.

Richards, James, and Braskamp, Larry. Who Goes Where to Junior Colleges. Iowa City: American College Testing Program, 1967.

Richards, James M.; Rand, Lorraine; and Rand, Leonard. A Description of Junior Colleges. Iowa City: American College Testing Program, 1965.

________; Rand, Lorraine; and Rand, Leonard. Regional Differences in Junior Colleges. Iowa City: American College Testing Program, 1965.

Rouche, John E., and Boggs, John R. Junior College Institutional Research: The State of the Art. Washington: American Association of Junior Colleges, 1968.

Solomon, Daniel; Bezdek, William, E.; and Rosenberg, Larry. Teaching Styles and Learning. Chicago: Center for the Study of Liberal Education, 1963.

State of Illinois. The Public Junior College Act. Springfield: West Publishing Company, 1969.

Stern, George G. "The Intellectual Climate in College Environments." The College Student and His Culture: An Analysis. Edited by Kaoru Yamamoto. Boston: Houghton Mifflin Co., 1968.

Trow, Martin. "The Campus Viewed as Culture." Research on College Students. Edited by Hal T. Sprague. Boulder, Colorado: Western Interstate Commission for Higher Education, 1960.

________. "Student Subcultures and Administrative Action." Personality Factors on the College Campus: Review of a Symposium. Edited by R. Sutherland, W. Holtzman, E. Harle, and B. Smith. Austin: The Hogg Foundation for Mental Health, 1962.

Articles

Astin, Alexander W., and Holland, John. "The Environmental Assessment Technique: A Way to Measure College Environments." Journal of Educational Psychology, 52 (1961), 308-316.

Astin, Alexander W. "Further Validation of the Environmental Assessment Technique." Journal of Educational Psychology, 54 (1963), 217-226.

Baker, S. R. "The Relationships Between Student Residence and Perception of Environmental Press." The Journal of College Student Personnel, 7 (July, 1966), 222-224.

Birdie, Ralph F. "Changes in University Perceptions During the First Two College Years." The Journal of College Student Personnel, 9 (March, 1968), 85-89.

________. "College Expectations, Experiences, and Perceptions." The Journal of College Student Personnel, 7 (November, 1966), 336-344.

Cross, Patricia K. "The Quiet Revolution." The Research Reporter, Vol. IV, No. 3 (1969), 1-3.

Gelso, Charles, and Sims, David. "Perceptions of a Junior College Environment." The Journal of College Student Personnel, 9 (January, 1969), 40-43.

Gibb, C. A. "Classroom Behavior of College Teachers." Educational and Psychological Measurement, 15 (1955), 254-263.

Greer, Thomas. "Perceived Characteristics of Junior Colleges." Peabody Journal of Education, 44 (1966), 3-5.

Ivey, Ellen E.; Miller, C. Dean; and Goldstein, Arnold D. "Differential Perceptions of College Environment: Student Personnel Staff and Students." The Personnel and Guidance Journal, 46 (September, 1967), 17-21.

Johnson, Richard W., and Krupius, Wayne J. "A Cross-Sectional and Longitudinal Study of Students' Perception of Their College Environment." The Journal of College Student Personnel, 8 (May, 1967), 199-203.

Lindahl, Charles. "Impact of Living Arrangements on Student Environmental Perceptions." The Journal of College Student Personnel, 8 (January, 1967), 10-15.

Lynes, Russell. "How Good Are the Junior Colleges?" Harper's Magazine (November, 1966), pp. 58-62.

McPeek, Beth L. "The University as Perceived by Its Subculture: An Experimental Study." Journal of the National Association of Women Deans and Counselors, 30 (Spring, 1967), 129-132.

Michael, William B., and Boyer, Ernest L. "Campus Environment." Review of Educational Research, 35 (October, 1965), 264-276.

Pace, C. Robert. "When Students Judge Their College." College Board Review, 58 (Winter 1965-66), 26-28.

________, and McFee, Ann. "The College Environment." Review of Educational Research, 30 (1960), 311-320.

________, and Stern, George G. "An Approach to the Measurement of Psychological Characteristics of College Environments." Journal of Educational Psychology, 49 (1958), 269-277.

Stern, George G. "Characteristics of the Intellectual Climate in College Environments." Harvard Educational Review, 33 (Winter, 1963), 5-41.

Standing, G. Robert, and Parker, Clyde A. "The College Characteristics Index as a Measure of Entering Students; Preconceptions of College Life." The Journal of College Student Personnel, 6 (October, 1964), 2-6.

Solomon, Daniel. "Teacher Behavior Dimensions, Course Characteristics, and Student Evaluation of Teachers." American Educational Research Journal, 3 (1966), 35-47.

Thistlethwaite, Donald L. "College Press and Student Achievement." Journal of Educational Psychology, 50 (1969), 183-191.

Walsh, William B. "Validity of Self Report." Journal of Counseling Psychology, 14 (1967), 18-23.

Wilson, Ronald, and Dollar, Robert. "Students, Teachers, and Administrators Perceptions of the Junior College Environment." The Journal of College Student Personnel, 11 (May, 1970), 213-216.

Reports

Isaacson, Robert; McKeachie, W. J.; and Milholland, J. E. Research on the Characteristics of Effective College Teaching. Cooperative Research Project No. 850. Ann Arbor, Michigan: University of Michigan, 1964.

Pace, C. Robert. The Influence of Academic and Student Subcultures in College and University Environments. Cooperative Research Project No. 1083. Los Angeles: University of California, Los Angeles, 1964.

Unpublished Materials

Centra, John A. "Student Perceptions of Total University and Major Field Environments." Unpublished Ph.D. dissertation, Michigan State University, 1965.

Davidson, Oluf M. "Survey of Reliability of Student Self-Report High School Grades." Iowa City, 1964.

Gold, Benjamin K. "The Junior College Environment: Student and Faculty Perceptions of Los Angeles City College." Los Angeles, 1968.

Illinois Junior College Board: Standards and Criteria for the Evaluation and Recognition of Illinois Public Junior Colleges and Other Guidelines, Policies and Procedures Approved by the Illinois Junior College Board. Springfield, 1970.

Stringer, James. "Identification and Analysis of Educational Status and Progress of Five Hundred Sophomore Students at Hutchinson Community Junior College." Paper presented to the Institute for Student Personnel Workers, East Lansing, Michigan, 1969.

Swanson, Herbert L. "An Investigation of Institutional Research in the Junior Colleges of the United States." Unpublished Ph.D. dissertation, Los Angeles, 1965.

Van Istendal, Theodore G. "Community College Institutional Research." Paper presented to the Association of Institutional Research, Chicago, 1969.

APPROVAL SHEET

The dissertation submitted by R. Edmund Dolan has been read and approved by members of the School of Education.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date

Signature of Advisor